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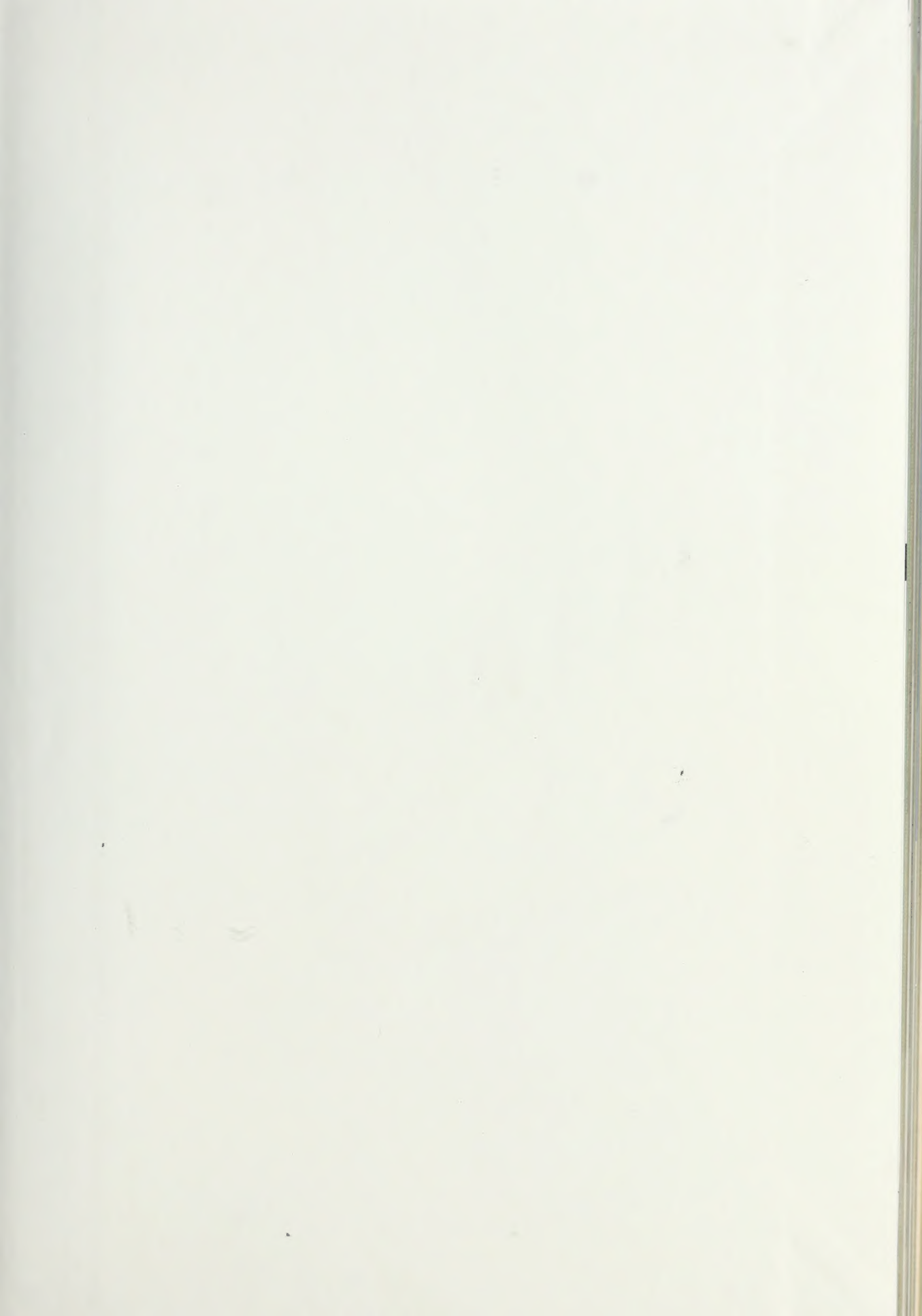
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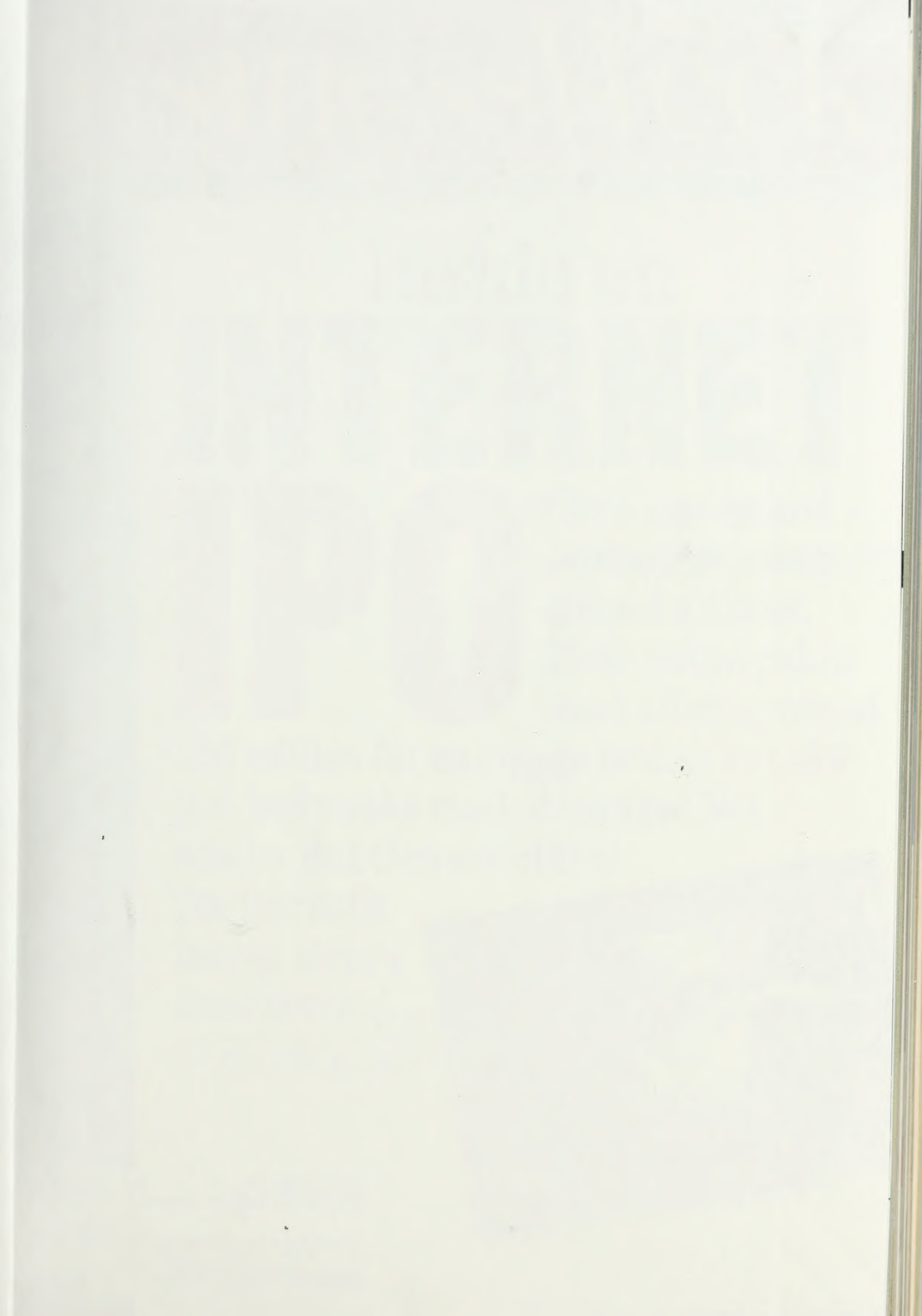
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BusinessWeek

SEPTEMBER 6, 1999

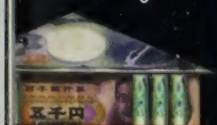
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fix the
house?

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Health Funds
Best
bets

Loan
amergers:
than
ts the eye



Inside an **INTERNET IPO**

Chris Larsen and
Janina Pawlowski
dodged a bullet.
Their initial public
stock offering raised

\$50 million for mortgage broker **E-LOAN**
just before the market savaged Net
stocks. But they are still at
the market's
mercy. Here's
their story. PAGE 60

BY ROBERT D. HOF



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A stock launch is no picnic, as E-Loan found out page 60

BusinessWeek

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MARTHA'S OFFER

Will her IPO prove to be as delicious as it looks? Sample this dish with care

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In popular imagination, going public is a sure path to easy riches. But is it really? For all the attention they command, initial public offerings remain shrouded in secrecy. Until now, that is: BUSINESS WEEK got permission to accompany Internet mortgage company E-Loan along every step of the IPO trail—from preparing a presentation for investors to a grueling two-week national road show to its tension-filled June 29 launch on the Nasdaq. It's a white-knuckle ride into the volatile world of Internet stocks

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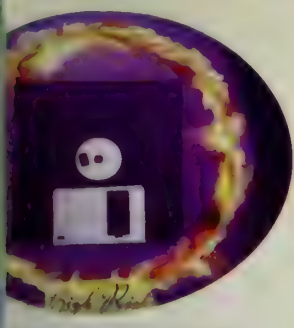
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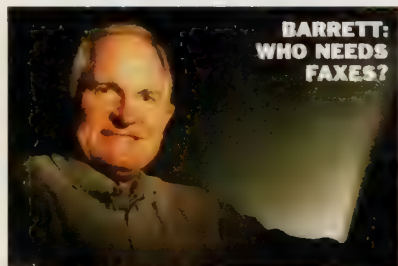
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Up Front

EDITED BY JOAN OLECK



**BARRETT:
WHO NEEDS
FAXES?**

SILICON SAGAS

THE CHIP GIANT IS AN E-COMMERCE GIANT

UNTIL RECENTLY, CISCO SYSTEMS and Dell Computer were the poster children for product sales on the Net. Now, Intel has quietly assumed that role. Over the past year, the chip giant has become the world's largest E-commerce company, logging more than \$1 billion per month in Net sales. Analysts figure that half of its revenues this year—or \$15 billion—will be E-bookings. By yearend, CEO Craig Barrett

predicts, up to three-quarters of orders will arrive electronically.

Those aren't incremental sales, though: Intel has merely swapped Web forms for fax and phone-call order-entry systems. Benefits are accruing instead in the expense column. For instance, Intel now gets 45,000 fewer faxes per quarter from Asian buyers, and later this year, all Taiwanese orders will be electronic. Best of all, the clerks who transcribed orders now concentrate on customer relations.

Intel hasn't yet calculated its savings. But the move helps counteract sagging processor prices. Analysts expect spending on sales and administration to fall one percentage point in 2000—saving more than \$250 million. Intel's next step: using E-commerce to goose sales growth. *Andy Reinhardt*

CAMPAIGN GIFTS

BIG WHEEL ON A SMOOTH TRACK

AS CHAIR OF THE FEDERAL Surface Transportation Board, overseeing railroad and trucking regulation, Linda Morgan angered unions: Rail workers decried her votes on issues like the Conrail takeover. Despite their hue and cry, Morgan's bid for a second term seems locked up.

How? For starters, the rail industry likes her work. She's also former general counsel to the Senate Commerce Committee, which this fall will consider the five-year reappointment. As such, she worked for Senator Ernest Hollings (D-S.C.), the panel's influential ranking minority member. Then, last fall, as her term expired and union pressure mounted, Morgan and her husband each gave the

Hollings campaign \$1,000. Morgan also gave the senator's leadership PAC its largest donation, \$5,000, on Oct. 28. Days later, the PAC gave Hollings' campaign an identical sum.

Coincidence? Maybe, but Paul Hendrie of the Center for Responsive Politics says the move effectively circumvents donor limits. Morgan, asked about the gifts' propriety, stated that as a congressional staffer she was barred from giving to the Hollings camp and simply took her first opportunity. And Hollings? He persuaded the Administration to renominate her. *Lorraine Woellert*

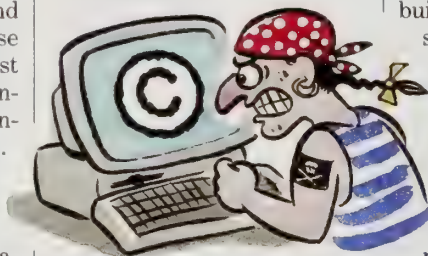
TALK SHOW "People float rumors... it works its way into mainstream press and they try to make me prove a negative

—George W. Bush in USA Today, when asked to discuss rumors of drug use in his youth

I-WAY PATROL

SHIELD THOSE DIGITAL DOCUMENTS

ONCE YOU START SELLING content on the Web, you're bound to lose control: Your expensive reports go whizzing around the globe in the form of E-mail attachments; graphics pop up on others' Web pages without so much as a source line. No wonder publishers hesitate to



put valuable material online.

But Xerox has an answer: On Aug. 30, the company will introduce ContentGuard, software that uses Xerox' new

Digital Property Rights language to embed copy protections within a file of digital document. The shot? Viewers can't list bootleg copies without first asking—and presumably paying. Even publishers circulate free content benefit from the software's ability to track distribution.

Already on board is Thomson Learning in Stamford, Conn. Thomson will use software to let professors build their own textbooks

selecting content from the company's database, tallying the cost of students. Instead of several books per semester, students will pay only what they need. "I think publishers will make everything

Web free," complains Adam Clowes, a Thomson vice president. "If that happens, publishers would go out of business." *Janet Rae-In*

NET MANIA

GROOVIN' TO AN IPO

WHEN THEY GO PUBLIC, dot.com IPOs—just like their mainstream peers—typically reserve low-price

shares for management and venture backers. Not MP3.

Com, whose IPO was July 26. The San Diego company, which offers digitized recordings over the Web, spread the wealth.

Beneficiaries included the musicians who play on MP3.Com's Web

site and the people who use its products. Roughly 1 million of the 12.3 million shares available were sold to 18,000 such artist customers. The opening price: 28, with a limit on shares.

Good vibes resounded from artists saying, "We've heard every record started a college fund for my kid," to "I got out of debt reports." MP3.Com's Michael Robertson brings us to Peter Clough of Baltimore. He bought an MP3.com T-shirt, then surprised at his chance to buy stock at its IPO. He bought 500 shares for \$14,000 and watched the price hit 95. He then sold 400 shares at \$80 apiece for a gain of \$18,050. As the market zapped Net stocks, he kept the remaining shares, bringing in a further \$18,000. Not bad. "Plus," Clough, "it was a cool shirt." *Roy Fur*



CLOUGH:

Hey, great shirt

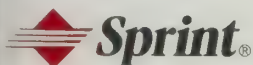


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Up Front

CAMPAIGN 2000

A VOTE FOR AMERITECH?

IF IMITATION IS TRULY THE sincerest form of flattery, Ameritech should be ecstatic. That's because Vice-President Al Gore's "Gore 2000" campaign logo bears a striking resemblance to the Midwest phone company's.

Both feature their names in white typeface, accented with a red ellipse on a blue background. Gore's contains a white star; Ameritech's features a red dot over the letter "i." The company says it plans to retain the logo after its merger with SBC Communications.

The campaign confirms

there were discussions about the similarities, but officials decided the differences were great enough to avoid legal complications.

Ameritech seems unfazed that Gore imitated its logo, adopted in 1992. Ameritech spokesman Jerrell Ross said he was "not aware of the similarities between the two logos" until BUSINESS WEEK brought it to his attention. Ross said he did not know of any request from the

Gore campaign for permission to use a similar logo.

In any case, Gore should not be expecting a contribution from Ameritech CEO Richard Notebaert. He has already donated \$1,000 to Democratic rival Bill Bradley. *Heather Skiles and Richard S. Dunham*



CAREER TRACKS

SET TO JUICE UP THE WEB



MARRAM: Tropicana-fresh

AS CEO OF TROPICANA, ELLEN Marram transformed that stagnant brand into a market leader. Now, she has an even tougher task in food and beverages as chief exec of an E-commerce venture she hopes will help streamline her \$11 trillion industry.

The company is EFDEX—short for electronic food and beverage exchange. The Stamford (Conn.) outfit plans to launch an online site in

Britain this fall and in the U.S. next year. The idea: to provide food companies with comparative pricing, supply information, analysis—and an electronic market.

What has this got to do with the juice business? "She's almost obsessive about understanding the customer," says Tim Carron-Brown, EFDEX' chairman. At Tropicana, RJR Nabisco alum Marram keyed in to health concerns, making a marketing coup out of the juice's fresh, not concentrate, base. Not just that: She took Tropicana global.

Then she became a true believer in the Web—so the EFDEX job felt right. "It's a combination of E-business with an industry I've been in 30 years," says Marram, 50. Can she sell its traditionalist constituency on high tech and beat two E-competitors? Depends whether she can squeeze rivals the way she did Tropicana. *Steve Hamm*

DRAWN & QUARTERED



OVER THERE

THE NET: EUROPEANS AREN'T BUYING

DESPITE AN EXPLOSION OF internet use in Europe, many in the wired set there are loath to shop online. True, a new European Commission study shows that an estimated 50 million Europeans are online and that the number is growing. But with few exceptions, making purchases isn't what Europeans like to do with their PCs.

In Sweden and Denmark, where Net penetration is Europe's highest—at 20% of households—online shopping is relatively rare. Even Finns and their famously wired nation are blasé about electronic commerce. "They just use

E-mail and information services," says Mikhail Ananov, an Internet researcher at International Data Corporation, Copenhagen. In fact, the study shows that Europeans value the Internet more as a way to work from home than to catch up on local news, choose vacation destinations, or take courses.

Europe's real online shoppers? The British. Although the Internet reaches more than 5% of Finnish households, the U.K. has had

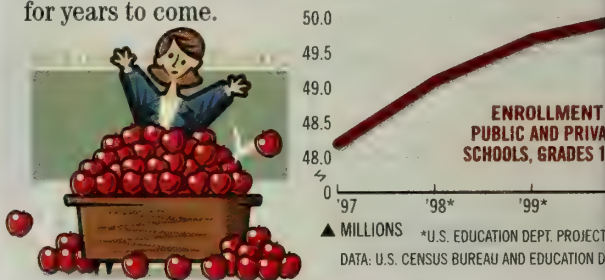
decades of experience with Minitel, a network of thousands of public computer terminals that provide a variety of information services. So, for the Finns, E-commerce isn't such a leap. *William Ech*



THE BIG PICTURE

THE NEW BACK-TO-SCHOOL BOOM

Nearly 50 million kids head back to elementary and high school this year, comfortably surpassing the baby boom record of 48.7 million students in 1970. And boomers' children will push the numbers even higher for years to come.



FOOTNOTES Workers who stay with jobs they dislike, because of good pay: **40%**; by gender: men, **43%**; women, **37%**

I have frustrated cynics.

I work for J.P. Morgan.

natashatsukanova@jpmorgan.com (investment banking-energy advisory)

[illegible]

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FIRE UP OVER GUN CONTROL

I was extremely disappointed with "Say yes to serious gun control" (Editorials, Aug. 16). While "Under Fire" (Cover Story, Aug. 16) was balanced and informative, the editorial was far off the mark. Unregulated ownership of firearms in America contributes far more to our society than it costs. According to a recent study, there are 134,000 firearm-related injuries in the U.S. annually, including wounds inflicted by police officers, self-inflicted wounds, accidental shootings, and defective gun explosions, in addition to criminal assaults.

According to the Lott study, during the same period, the legal use of firearms by private citizens prevented 2.5 million crimes, such as rape, robbery, assault, and murder. Even with the "fudge factor" of suicides and accidental shootings factored in, firearms in the hands of U.S. citizens are 20 times more likely to prevent a serious crime than they are to cause even minor injury.

Yes, random violence is terrifying. But we should not allow a right that has protected our political process for more than two centuries to be compromised out of panic over the actions of an insane few.

Jim Gahar
Mesa, Ariz.

Your comment about most people not needing handguns flies in the face of numerous studies indicating that guns (usually handguns) are used three to five times more often in self-defense than they are in the commission of crimes. You ignore the fact that the safest places in this country tend to be those with the least amount of gun control. Vermont doesn't even require permits to carry concealed weapons, yet it's safer than places like Chicago, which

ban guns outright. You also ignore the fact that only 3% or 4% of the owning public will commit a criminal irresponsible act in their lifetimes.

Your suggestion that those who oppose gun control are extremist survivalists and anarchists is insulting and in error. My Asian-born wife and I are college-educated, white-collar professionals. We are a fairly common profile for members of pro-gun organizations. She has voted in every election since becoming a citizen, hardly the action of an anarchist.

Your statement that police in every town support gun control is wrong. Surveys of rank-and-file police associations show substantial opposition to gun control. Politically appointed police officials



FIGHT CONFISCATION

"Your suggestion that those who oppose gun control are extremist survivalists and anarchists is insulting and in error"

tend to be out of step with the citizens on the beat.

You favor registering all guns, but it's a truism that registration leads to confiscation. This century has demonstrated time and time again that the only defense against tyranny is an armed populace.

David H. Arlington

Confiscation is the only purpose of gun registration. Registration lists have been successful in disarming law-abiding gun owners from New York to Chicago.

While no one "needs" to own a handgun or an assault rifle, it is equally true that no one "needs" anything more than bread, water, modest clothing, and a place to live. However, in America, we pride ourselves on being a free people having the right to purchase that which we choose so long as we are

Business Week

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RECTIONS & CLARIFICATIONS

21 ideas for the 21st century," (Cover story, Aug. 30), BUSINESS WEEK said John C. son, chief technology officer of Irvine sors Corp., predicted that a shoebox-size ficial brain could be developed before 5. The prediction should have been 0. Also, the company is in Costa Mesa, f., not Silicon Valley.

table in "Battle of the batteries" (Science chnology, Aug. 9.) misstated the number cycles for Evercel's nickel-zinc batteries. / can be recharged 500 times, not 50.

Brotherly love, but it will cost you," ront, July 19) incorrectly credited data small-business taxes in various cities. source was Vertex Inc.

he Web site for University of Maryland ersity College was incorrectly listed in ing the ivory tower," (Social Issues, 9). It should be www.umuc.edu.

The great net stock sell-off" (News: ysis & Commentary) erred in reporting globe.com's second-quarter earnings re-. The loss was 27¢ per share, not 54¢. , theglobe.com released its results on 3, not Aug. 2.

ng. No one "needs" to purchase an nsive sports car that can run at the speed limit, but in this coun- you have the economic freedom so, even in the midst of highway ties.

Brian Bissett
Waterford, Conn.

ank you for the lucid and com- g editorial. It is gratifying to see a e element of the media speak up so fully for sane government action is issue. The undue influence of un lobby on our legislators has to fectively confronted and overcome common sense. It is way past time anity and proper responsibility to over in Congress and our state atures. Good for you, BUSINESS

Richard D. Higgins
Menlo Park, Calif.

I read about how the Tec-9 used lumbine High School found its way he hands of Eric Harris and Dylan old, it brought back terrible mem- of the 1993 law-firm massacre here n Francisco. The killer used two s—weapons identical to the Tec-9. the citizens who still spout off the constitutional right to bear weapons had been at the scene of nbine High or 101 California t, I believe that they would change point of view very quickly.

Mark Mackler
San Francisco

MAYTAG'S LLOYD WARD: "WHAT A ROLE MODEL"

Your story, "The saga of Lloyd Ward" (Cover Story, Aug. 9), should be manda- tory reading by and discussion with black youth, teachers of predominately minority students, black leaders, church- es serving minority communities, and organizations serving these communi- ties. The example of Mr. Ward should be used as a benchmark for their efforts to

provide guidance to both minority youth and professionals. His statements "Knock on the door, pull on the handle, and, if you have to, dismantle the hinge!" and "Just because you can't see how to get someplace doesn't mean you don't set the goal" should be their guid- ing principles during the 21st century.

I concur with Mr. Ward's efforts sup- porting higher academic accomplish- ments by black high school students. Only through such efforts as his will these students be prepared for partici-

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pation as entrepreneurs or professionals in our rapidly expanding economy.

Arthur D. Rogers
Alexandria, Va.

What a role model for the youth of America. As the 7th child in a family of 12 and with a father who often held three jobs to feed and clothe us, I can relate to Mr. Ward. It is rare to have an athlete who completes college while pursuing a rigorous engineering degree. Mr. Ward is indeed a model of what can be achieved with personal perseverance and help from so many others.

Joseph J. Neff
Indianapolis

WITH UNIVERSAL HEALTH CARE, A STRONGER CORPORATE AMERICA

In "HMOS: A good idea that could get a lot better" (Economic Viewpoint, Aug. 9), Laura D'Andrea Tyson recommends health-care changes that are at once irrelevant to millions of Americans and unsatisfactory to the interests of American business. No useful proposal for reforming health care—in a state or nationally—can avoid addressing the growing numbers of the uninsured as well as the underinsured.

It's no secret that business policies are contributing to this growth. Although firm by firm, financial reasons for shifting costs or cutting coverage may seem compelling, U.S. business as a whole doesn't escape paying for the health care of the employees and their families impacted by those decisions. Consequently, the lack of a universal health-care system handicaps Corporate America in the global market chase.

Dan Hodges
Chair
Health Care for All-California
Berkeley, Calif.

HOW FEDERAL FUEL-ECONOMY STANDARDS BACKFIRE

The real story behind "Smoke and mirrors and mileage" (News: Analysis & Commentary, Aug. 9) is how Washington forces carmakers to engage in elaborate shell games to comply with federal corporate average-fuel economy (CAFE) standards. Supplying trucks for the U.S. Postal Service that run on taxpayer-subsidized ethanol to earn CAFE "credits" is only one of the distortions this misbegotten law has brought forth.

Thanks to CAFE's arbitrarily set fuel-efficiency standard, auto makers waste millions producing vehicles that consumers don't want. Cars and light

trucks found on the Environmental Protection Agency's 1998 list of the nation's most fuel-efficient vehicles amounted to 0.08% and 0.03% of sales, respectively. The attempt to force-feed Americans these undersized vehicles has failed primarily because buyers know they are less safe than their larger counterparts. Death is a high price to pay for automotive political correctness.

CAFE is a splendid example of mission creep. Created to encourage energy efficiency and reduce America's dependence on foreign oil, it has accomplished neither. Now touted as a means to combat global warming, CAFE is in reality the biggest threat to highway safety.

Bonner R. Cohen
Senior Fellow
Lexington Institute
Arlington, Va.

A COFFEE AGREEMENT GIVES READERS A RUSH

In his review of my book, *Uncommon Grounds*, David Leonhardt found the stories and quirky characters sufficiently interesting to paraphrase at length ("The rise and fall and rise of coffee," Books, Aug. 16). It is a mystery to me, then, why he objected to my coverage of the International Coffee Agreement. Not to write about the ICA would have been like writing a history of oil without discussing OPEC. With its "tourist coffee," smugglers, black market, millionaire speculators, and midnight meetings, the ICA was hardly boring.

The U.S. joined the quota agreement in 1962 because of cold war fears that Latin America and Africa would go communist if we allowed the price of coffee to collapse. We sabotaged the ICA in 1989 when we no longer cared, and the price of coffee plummeted below the cost of production for the next four years, causing terrible poverty in coffee-growing countries. Perhaps Leonhardt does not find such price gyrations to be of interest, but the boom-bust cycle is a vital and disturbing part of coffee's turbulent and entertaining history.

Mark Pendergrast
Essex Junction, Vt.

DOCS WON'T OVERDOSE ON OFF-LABEL DRUG USE

"Take only as directed (wink)" (News: Analysis & Commentary, Aug. 16) barely mentions the reason for the common practice of off-label uses for drugs. Physicians routinely prescribe drugs for uses not approved by the Food & Drug Administration because the agency is

so slow in approving new drugs and additional uses for existing drugs.

Amy Barrett expresses concern about the new freedom drugmakers have in providing medical information to physicians about off-label uses for approved drugs, as though providing physicians with clinical information from peer-reviewed journals was some kind of new practice. Her assumption seems to be that drug-company salesmen will bamboozle physicians into overprescribing their drugs for unapproved uses. In reality, 73% of doctors in polls conducted by the Competitive Enterprise Institute said the FDA should not restrict information on off-label uses. And she said the FDA's current practice of requiring such information makes it hard to learn about beneficial new treatments.

An estimated 40% to 50% of prescriptions written are for off-label uses. The alternative is often to leave patients with an inferior treatment or no treatment at all.

Gregory A.
Policy Analyst
Competitive Enterprise Institute
Washington, D.C.

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LIVE HELP NOW

NET EFFECT BRINGS REAL-TIME CUSTOMER SERVICE TO THE INTERNET

Imagine entering a computer superstore needing to make an urgent purchase. Shelves tower around you like skyscrapers, lined with inventory of every kind. After a long search, you find a product that might meet your needs, but aren't sure, so you solicit a salesperson's help. He smiles politely, asks you to e-mail your question to him, and promises a reply in two or three days.

Absurd? Of course it is. No real-world store would treat its valuable customers in this way. And yet this is exactly the scenario that confronts the majority of Internet shoppers, who are rarely able to get answers to their questions when they need them most.

"The irony is that the primary benefit of online shopping—customer convenience—is being undermined by a lack of real-time purchasing assistance," notes Julie Schoenfeld, president and CEO of North Hollywood, Calif., based real-time online customer service solution provider Net Effect Systems. "Despite the tremendous growth in e-commerce activity, the lack of real-time customer service means that hundreds, maybe thousands of dollars in potential sales is being left in abandoned shopping carts, and buyers are going away dissatisfied every day."

IMPROVING QUALITY, REDUCING COSTS

Net Effect helps companies doing business on the Internet to recapture these lost sales through the industry's first fully scalable, real-time online customer service solution. It allows online shoppers, in effect, to take a company's entire sales force with them wherever they browse. By providing full storefront integration, application hosting, training, and even live customer service agents, if needed, Net Effect dramatically increases the quality of online cus-

tomers' service and reduces customer service costs by as much as 75 percent.

Such an offering couldn't be more timely. In surveys conducted earlier this year, Net Effect discovered that fully 67 percent of online purchases were never completed—selections were left literally sitting in electronic shopping carts. Overall, only about 1 in 20 people who visited e-commerce sites even attempted to make a purchase.

Net Effect's Schoenfeld believes that the lack of online customer service is a primary reason for such low browser-to-buyer conversion rates.

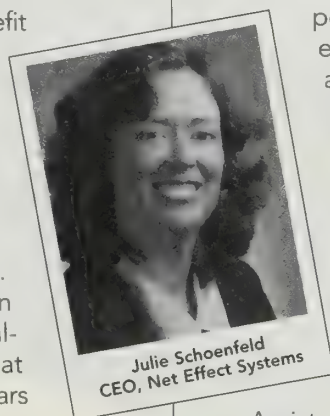
"Most of us need guidance and comparative information from a knowledgeable sales person before making many purchases," she says. "We especially need this assistance in the virtual and often unfamiliar world of the Internet."

SHOPPERS DON'T RECEIVE HELP

Unfortunately, most online shoppers don't receive this kind of help. Only three percent of major e-commerce sites offer a live "help" button—the equivalent of a roaming salesperson in a physical store—and, of these, only one in five has a live agent ready to help.

Assistance delivered via e-mail, the most common form of online customer service, isn't much better. In a survey of 125 top online sites this past Spring, Jupiter Communications, a New York based research firm, found that more than 50 percent of sites never responded to e-mailed customer service inquiries, took more than five days to reply, or offered no e-mail address on their site.

Even when assistance is provided, shoppers often remain frustrated. In many organizations, customer service wait times have become interminable. If a question is not answered on the first call, an average of four



Julie Schoenfeld
CEO, Net Effect Systems

(Continued)

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LIVE HELP NOW

more calls are typically required to resolve it. And because most customer service agents inadequately document support calls, the customer is usually required to repeat the entire conversation when a new agent or supervisor is brought in.

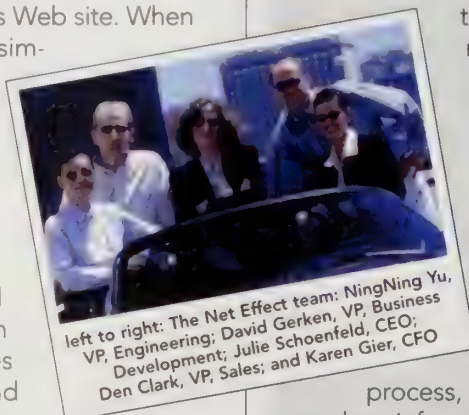
GET LIVE HELP NOW

Net Effect's solution to the shortcomings in online customer service is intended to achieve rapid, first-call resolution to customer inquiries by combining the best features of e-mail and phone-based customer service into a single, 24x7 real-time support system.

The heart of the Net Effect service is an unobtrusive "Live Help Now" button that can be easily inserted into a client's Web site. When a user clicks on the button, a simple, text-based screen pops up, allowing the customer to immediately converse—in real-time, chat-like fashion—with a live customer service agent.

Behind this simplicity, however, lies a sophisticated knowledge capture system that automatically transcribes each customer interaction and can be seamlessly linked to the company's legacy system databases. Customer service agents—working with as little as a notebook computer and a modem—can search and review these data repositories in real-time while responding to customer service questions, giving the agents a much wider range of resources for finding the right answers.

Perhaps most importantly, the Net Effect solution supports dynamic call monitoring, which allows a supervisor to invisibly observe a customer service session and to intervene as needed, without the customer's having to repeat anything. This invisibility further permits an individual customer service agent to handle multiple inquiries simultaneously (a capability unique to text-based support systems), dramatically increasing the efficiency of corporate customer service operations.



left to right: The Net Effect team: NingNing Yu, VP, Engineering; David Gerken, VP, Business Development; Julie Schoenfeld, CEO; Den Clark, VP, Sales; and Karen Gier, CFO

CREATING A POSITIVE EXPERIENCE

Although the company was launched just in 1998, Net Effect already counts among its clients a number of industry pacesetters, including Stream International (the world's third largest help desk organization), TELUS (one of North America's largest telecommunications firms), and SBC Internet Services (comprised of Pacific Bell, Southwestern Bell, and Nevada Bell Internet Services).

TELUS, which this past March deployed Net Effect's solution in combination with Redwood City, Calif., based BroadVision's dynamic personalization engine, has seen the number of registered users on its customer self-service site rise by nearly 300 percent over the past several months, with the burden on the company's more costly call center operations dropping significantly over the same time.

One of the main reasons for this turnabout: TELUS's Web site customers can engage live, online support at any point in the purchase process, whether to solicit additional product information or clarify billing options, allowing them to receive the personalized online support they need... right when they need it.

Net Effect's Schoenfeld finds a lesson in the TELUS story for companies delivering online services across the industry spectrum. "E-commerce sites work the same way as conventional retail establishments," she says. "Those that create a positive experience for customers will thrive. Those that don't, won't."

With repeat customer visits accounting for more than 60 percent of online sales, few things could be more important to an online vendor's bottom line than this.

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TAKE THE WORLD WITH YOU
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EYE
e Medical Establishment Let a Doctor Get Away With Murder
es B. Stewart
& Schuster • 334pp • \$25

HITE COATS, LACK HAT

ou've probably heard that the American Medical Assn. has recently been trying to form a Well, getting the public's sympathy that may very well require buy-all available copies of James B. rt's new book, *Blind Eye: How Medical Establishment Let a Doctor way With Murder*, and locking n a vault somewhere. After read-s volume, the last thing anybody want to do is strengthen the between doctors.

d Eye is a flat-out horrifying non-profile of Michael Swango, a an who Stewart says may well be untry's most prolific serial killer. urrently in prison in the U.S., a year into a 42-month sentence minor charge of providing false ents. But, says the author, an in-onal scramble is under way to enough evidence to charge him ne or more of what the FBI be-may be at least 50 murders.

nearly 20 years, Swango worked s a paramedic and as a fully priv-physician in several U.S. states Africa. Wherever he went, Stew-rges, patients soon started dying ably, often minutes after he left ooms. The author accumulates ce that Swango was a compul-sioner with little or no actual re-hip with his victims and no ap-motive for doing them in.

's bad enough. But even if this motive helped Swango escape ation, plenty of clues seemed to t that he was a psychopath. His ising physicians, the author sug-were unwilling to face the facts. ough a brilliant and outgoing hon-ident, Swango appeared to suf-ramatic personality shift after a mid-1970s stint in the Marine He obsessed openly about serial rers and violent death and as-

sembled scrap books of horrible acci-dents. At Southern Illinois University School of Medicine, where he was ad-mitted in 1979, his peers immediately found him strange and off-putting. They observed that he had a seeming con-tempt for patients, for their families, and for normal procedures. And, they said, many patients on whom he had just collected medical histories would suddenly become acutely ill and even die. This earned him the nickname "Double-O Swango," a play on James Bond's 007 designation. Colleagues joked that Swango seemed to have a "license to kill."

Swango narrowly es-caped expulsion as a result of several procedural vi-olations and other infrac-tions, Stewart says. But soon the apparent pattern of deaths followed Swango to his residency at Ohio State University Medical Center. He was observed injecting something into a patient who immediately suffered paralysis and nearly died. But he was cleared in a cursory investiga-tion in which Stewart says evidence was destroyed and patient testimony mischaracterized to squash the scandal.

Stewart displays the medical caste system at OSU and several other hospi-tals in stark relief: Physicians and hos-pital administrators repeatedly turned a deaf ear to the pleas and concerns of medical students, nurses, patients, and paramedics who witnessed Swango's macabre behavior. The authorities were always inclined to write off the con-cerns as jealousy or unfounded gossip.

In 1985, after a team of paramedics showed that he was spiking their iced tea with arsenic, Swango was found guilty of five counts of aggravated bat-

tery and served two years of a five-year sentence. But for several years af-ter his release, he got hospitals and am-bulance companies to overlook his conviction and hire him. Eventually, Swango traveled to Africa to continue working with patients and to avoid mounting legal troubles. There, Stewart says, the killing continued.

Former *Wall Street Journal* editor and Pulitzer prize winner Stewart, like Swango, is a native of Quincy, Ill. He never knew Swango but was alerted to the case and inspired to write about it by an old friend and local judge, Dennis Cashman, who had handled Swango's original poisoning trial in 1985. Cash-man told Stewart: "There is an unwrit-ten rule in the medical profession. Inept doctors do not get reported. Just get them out of town."

Stewart is an excellent writer and reporter. He employs court documents and hundreds of interviews to meticu-lously document Swango's trail. Yet

there are two shortcomings worth noting. Swango would not talk to Stew-art—and that poses a prob-lem: Swango's alleged mo-tives remain a mystery, especially since Stewart never finds anyone to whom the doctor confessed.

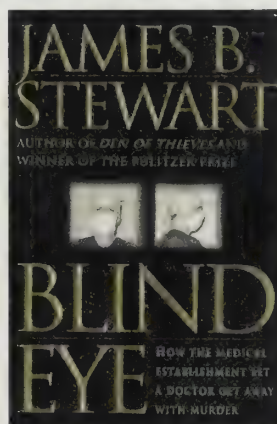
Also, Stewart doesn't quite do justice to the larg-er issues. He discusses the flawed National Practitioner 'Data Bank, which is de-signed to prevent such characters as Swango from

going undetected. But although he pro-vides a few examples of other docs run amok, the extent of the problem of dan-gerous physicians isn't comprehensively considered or analyzed.

Still, this a brave and passionate book. Whether Swango is ever tried for murder, his poisoning conviction—not to mention the disturbing events that dogged his career—should have kept him from attending any more patient bedsides. Physicians may feel embat-tled on many fronts, but circling the wagons on matters of patient safety is intolerable.

BY JOAN O'C. HAMILTON

Hamilton, who writes *BUSINESS WEEK's* Digital Dispatch column, has also covered health care extensively.



STEWART TRAILS THE DOCTOR WHO HE SAYS MAY BE THE NATION'S MOST PROLIFIC SERIAL KILLER

THE BUSINESS WEEK BEST-SELLER LIST

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Reviews and more are available on AOL (Keyword: BW) or www.businessweek.com

HOT TYPE

FIRST, BREAK ALL THE RULES, THE NO. 4 hardback on this month's list, has a thesis that chief financial officers will love: Money can't buy you employee loyalty, productivity, or profits. So never mind new bonuses or profit-sharing plans. Just concentrate on having great middle managers.

That, of course, is a conclusion that management consultants—including the authors—also love, since molding managers is their stock in trade. But don't imagine that Marcus Buckingham and Curt Coffman, both of the Gallup Organization, just made it up. Their lessons derive from "two mammoth research studies."

The first product of this research is Chapter One's list of 12

questions meant to help businesses "attract, focus, and keep the most talented employees." Among these: "Do I know what is expected of me at work?" and "At work, do my opinions seem to count?" If employees respond to these in the negative, their company isn't likely to be very productive or profitable, we're told.

Succeeding, and less interesting, chapters instruct in the arts of hiring, setting expectations, getting workers to focus on their strengths, and matching their abilities with appropriate jobs. A key insight: "People don't change that much," don't waste time trying to alter them. Fair enough—even if it's not a notion that other management consultants will love.

BY HARDY GRE



As I stood outside one morning, I noticed a crane moving a heavy load. Looked like about two tons of steel sheets. All of a sudden, the crane hits the side of another piece of machinery, and I realized it was right over me. It was coming at me fast and I couldn't think of where to go. I jumped, but it really felt like I was being lifted off the ground. Somehow, I actually landed on top of the load without a scratch.

Joseph Di Emidio, Philadelphia, Pennsylvania

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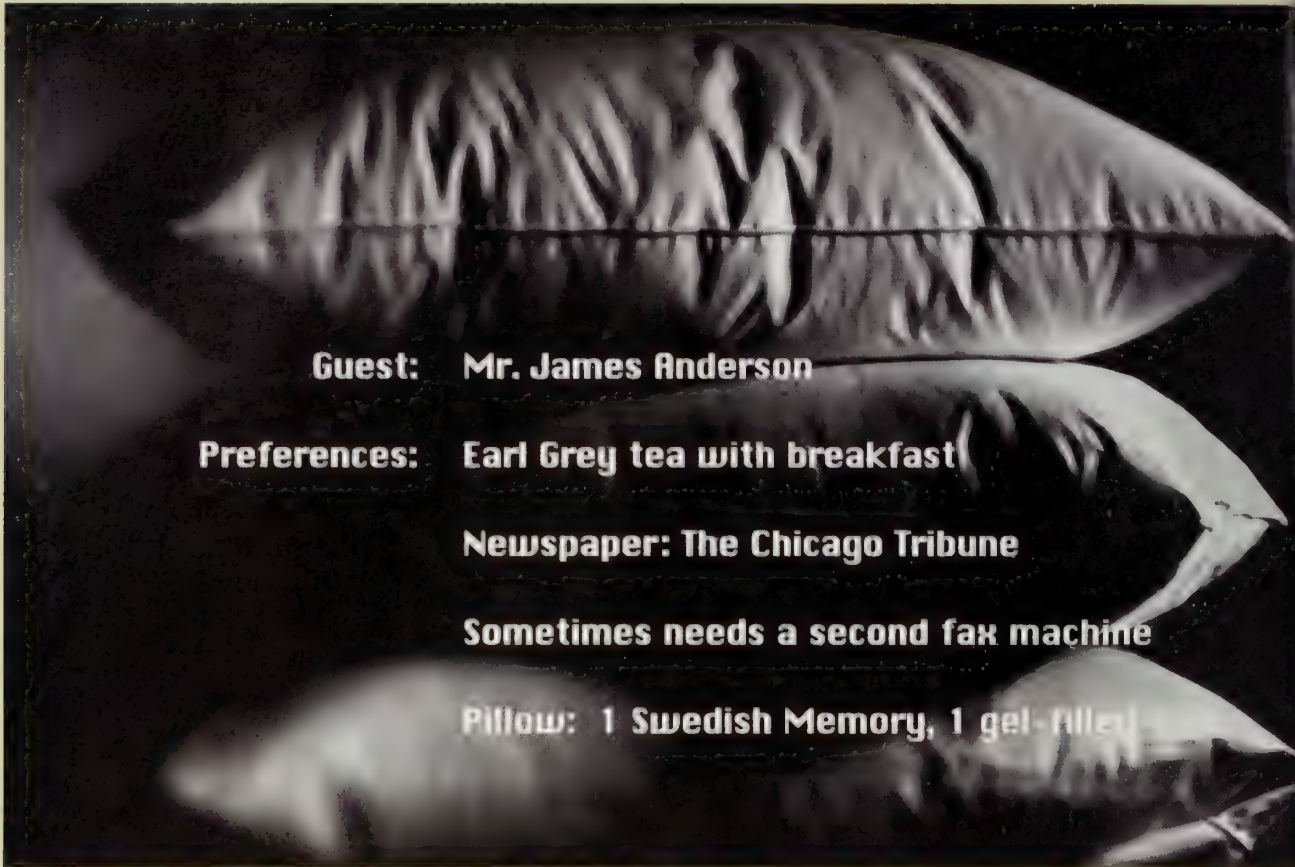
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STEPHEN H. WILDSTROM

WHAT I WOULD DO ABOUT MICROSOFT

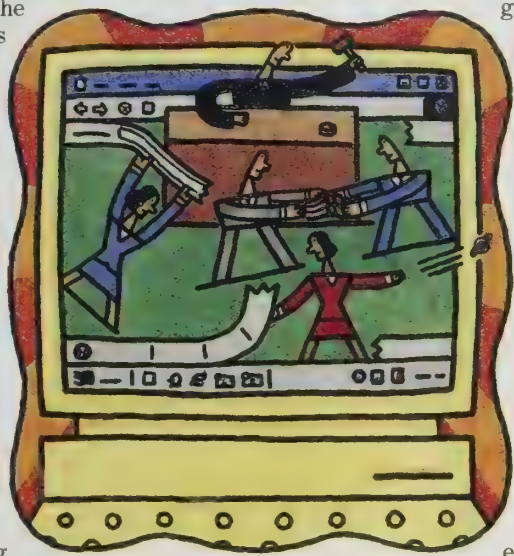
Judge Jackson should force the company to play fair without punishing consumers

Some time this fall, Judge Thomas Pennfield Jackson will finish up as much as he can of the record of U.S. v. Microsoft. After wading through summaries that run more than 1,200 pages, he will be ready to reach conclusions. If, as is likely, the judge finds at least some of the government's charges valid, the next step will be a decision on how to undo the damage done by Microsoft's future misconduct. It is where you will start to pay attention. The 15 years of motions, objections, and testimony in the case have been enlightening, sometimes amusing and occasionally infuriating. I thought the Justice Dept. made a strong case that Microsoft behaved badly, bullying competitors, customers, and "others" alike.

The case that this conduct punishes consumers, however, is weaker. Even in the government's own "Proposed Findings of Fact," Justice Jackson makes only a lame argument for adverse impact on consumers. Their conclusion that "Microsoft has denied consumers of the possibility of development of greater freedom in operating systems" doesn't put the software

company in the league of the Oil Trust. Given the slender evidence of damage to the public, Judge Jackson should be careful not to come up with a cure that is worse for consumers than the disease.

I think everyone would benefit if Microsoft were barred from many of the practices described in the trial. For example, computer makers should be free to set up Windows any way they like. If customers don't like the opening screen or if they object to the presence or ab-



sence of certain icons, they can buy someone else's computers. It's not Microsoft's problem, and the company should not be able to impose its will on manufacturers. Microsoft has eased some of its most onerous licensing terms, but I'd like to see the changes made mandatory.

To maintain consumers' freedom of choice, Microsoft should be made to stop coercing software companies and Internet service

providers into favoring Microsoft products over rivals'. If an ISP wants to make Netscape Navigator—or NeoPlanet or Opera—its default Web browser, that should be a matter between the service provider and its subscribers. Similarly, software companies should be free to use Apple Computer's QuickTime or RealNetworks' RealAudio instead of Microsoft formats without fear of retaliation.

BEST BROWSER. Many Microsoft critics want to go further, however, restricting the features that Microsoft could include in operating systems, even making the company remove its Internet Explorer browser from current products such as Windows 98. I believe this would be a terrible disservice to consumers. Software should be designed by software companies, not government committees.

Besides, many of the features Microsoft has added are useful. Internet Explorer 5.0 is the best browser around, both faster and less crash-prone than Netscape's.

Furthermore, events have proved that competition doesn't end when Microsoft incorporates a feature. America Online Inc. thrived because it offered a better product than Microsoft Network, despite MSN's prominent place on every Windows machine sold in the past five years.

RealAudio and QuickTime—both superior formats—have prospered despite competition from the built-in Windows Media Player. Consumers are neither stupid nor slaves to Microsoft's whims.

Any resolution of the case should ensure that Microsoft plays fair. But it should also leave it free to be an innovative competitor. That's the best way to look after the interests of consumers.

BULLETIN BOARD

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Fuga's \$150 eDiary looks a lot like a Palm. But it's a lot simpler. It doesn't offer handwriting recognition or share data with desktop contact managers. It does provide easy-to-use features for a combined calendar, to-do list, and expense log, and an address and phone book. Even technophobes will occasionally have to hook



PLAIN AND SIMPLE: Fuga's eDiary

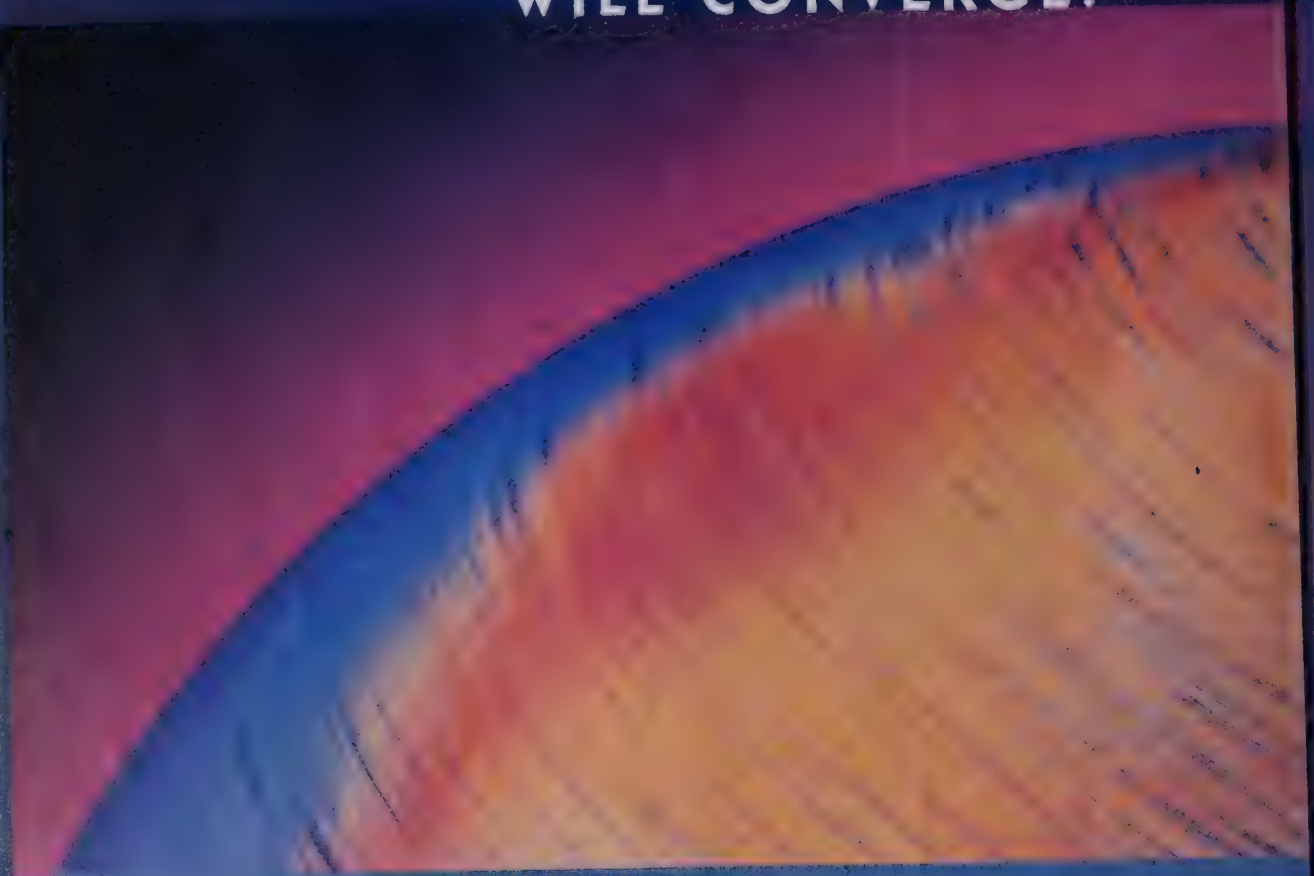
the eDiary up to a Windows computer's serial port, however. If you have any amount of data to enter, using the PC version, then downloading to the handheld is a lot easier than tapping the tiny on-screen keyboard. One criticism: The eDiary's cable connector, actually an extension of its system board, is far too flimsy. More info: 650 815-9423 or sales@fuga.com.

GRAPHICS

QUICKER DRAW

Fans of business drawing software from Visio should consider an upgrade to the new Visio 2000. The biggest improvement is probably the much faster performance, especially on large drawings, but the program also offers improved help and more wizards to make it easier to learn and to simplify Web publishing of drawings. Visio 2000 Standard costs \$199; an upgrade from earlier versions, available retail or online, is \$99. Contact Visio at 800 248-4746 or www.visio.com.

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BY ROBERT KUTTNER

WHAT DO YOU CALL AN ECONOMIST WITH A PREDICTION? WRONG



NO SCIENCE:
The supply-siders, the centrists, and the liberals need a trip to the woodshed for trying to divine the future from the past

It's time to hold economists more accountable for their predictions. Stock analysts are occasionally held to account for their forecasts, with embarrassing results. But it is rarer to revisit the projections of big-think economists. In recent decades, economists at both ends of the spectrum, as well as those in the middle, have had one thing in common: Most have been profoundly wrong about the economy.

Take the supply-siders, on the right. They told a very coherent story: The economy was constrained by a lack of savings, investment, and growth. Insufficient capital formation, in turn, reflected excessive taxes. In the Reagan era, taxes were indeed cut, but growth in the 1980s remained well below the long-term trend.

In the late 1990s, growth finally exploded—after Bill Clinton's 1993 tax hike on the upper-income brackets. Savings rates actually fell because households treated stock runups as the equivalent of savings. But in a global economy, the world's investors were happy to send capital to the world's most dynamic economy. Give one big demerit to the supply-siders.

The center has been obsessed with federal budget deficits. Also, centrist economists were convinced that the economy could do no better than growth rates of about 2% a year. A lower deficit might slightly improve growth, but we had better get used to an "age of diminished expectations," as Paul Krugman wrote. Well, growth is now running around 4%. The deficit is down, and it isn't the deficit reduction that caused the growth; rather, the growth eased the deficit. Give a demerit to the dour centrists, too.

CASSANDRA CALLING. The right and center deserve two other shared demerits—for first pooh-poohing the idea that the income distribution was growing steadily more unequal (it indeed was) and for scaring us silly about the impending bankruptcy of social insurance. Peter G. Peterson has been playing Cassandra on the latter issue and has institutionalized himself as the Concord Coalition. But higher growth and a little policy ingenuity have all but restored Social Security to full solvency.

Other straight-line projections have proven embarrassing. Richard Darman of the Bush Administration projected in 1991 that health care would be consuming 17% of gross domestic product by 2000. By 1993, the new

Clinton Administration was projecting it would consume 19%. But as Herbert A. Hirsch famously observed, "an unsustainable cannot be sustained." The year 2000, just a few months away, and the total care bill is about the same 13% to GDP that it was early in this decade.

What happened? Policies changed, resumed, and some paradoxical factors materialized. As a Duke University study demonstrated, many very old people actually cheaper to treat because when a life comes, it often comes quickly, while medical technology is expensive. Still, it will be a net savings over more intensive procedures.

POLITICAL QUESTION. The Keynesians didn't fare too well either. President Clinton took office proposing a Keynesian "stimulus package" of a temporary deficit that was posed to restore growth. But when he returned, it was driven by technology, not by public-sector pump-priming. That's certainly a good case for some restored investment in human and physical capital, as well as research and development. But it isn't exactly a Keynesian idea. The left is also wrong that worsening income distribution would necessarily hobble growth. Alan Greenspan's growth and extremes of wealth and poverty can coexist all too well. How to redress the imbalance is a political question, not an economic one.

Does anyone in this dismal group deserve some laurels? Both the supply-siders and the liberals can fairly share one gold star for disputing the centrist idea that the economy was forever doomed to slow growth. Paul Krugman gets a point for debunking the assertion of Japanese economic hegemony. The right and the center can take credit for ignoring the competitive pressure of globalization, and the left gets kudos for promoting ground rules for labor. The jury is still out on whether the dynamism of the new economy outweighs the increased risk.

The bottom line: Despite its scientific pretensions, economics still remains more an art than a science. The future, by definition, is unknowable, as the geniuses at Long-Term Capital Management discovered. Anyone who simply extrapolates past trends, however elegant the algebra, is an educated fool. Economics needs nothing so much as a healthy modesty.

Robert Kuttner is co-editor of *The American Prospect* and author of *Everything for Sale*.

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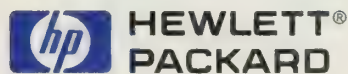
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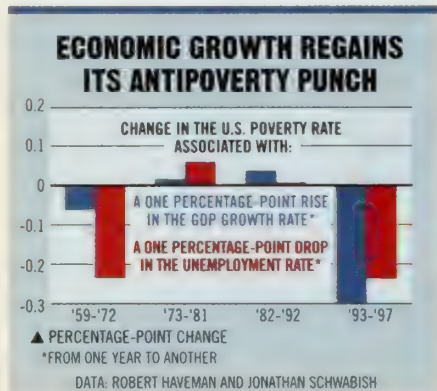
BY GENE KORETZ

HOORAY FOR THE RISING TIDE

It's finally benefiting the poor

Back in the early 1970s, it seemed a foregone conclusion that a rising economic tide would lift all boats. All through the early postwar period—and particularly during the long expansion of the 1960s—a robust economy and declining unemployment seemed sufficient to raise many out of poverty. In fact, the apparent effect was so strong that in 1971, one expert speculated that poverty in the U.S. would be virtually eliminated within a decade.

Fast-forward a couple of decades and



that prediction looked like a cockeyed optimist's dream. During the 1970s and 1980s, economic growth hardly made a dent in poverty. The contrast between the expansions of the 1960s and 1980s was especially sharp. Whereas some 35% growth in gross domestic product from 1963 to 1969 was accompanied by a 7.4% decline in the poverty rate, a nearly equivalent rise in GDP from 1983 to 1989 lowered the rate by only 2.4%.

By the early 1990s, many experts concluded that a growing economy by itself was no remedy for poverty. At the same time, many states began experimenting with welfare reforms that culminated in the 1996 national legislation that limited welfare dependency and encouraged recipients to seek work. The upshot has been warnings that welfare reform will only push people deeper into poverty, since economic growth and the rise in jobs that accompanies it no longer benefit the disadvantaged.

The good news, report Robert Have- man and Jonathan Schwabish of the University of Wisconsin at Madison, is that this doesn't appear to be happen-

ing. Using an econometric model, they find that economic growth and falling unemployment since 1992 appear to have regained the antipoverty punch they enjoyed in the early postwar period. Indeed, by their measure, the positive effects look even stronger (chart).

Several developments seem to explain the turnaround—particularly, recently rising pay and job opportunities for those at the bottom of the ladder. During the 1980s, real wages of low-income workers fell by 16%, while the real minimum wage plunged by 31%. Both have been moving higher in recent years. And the extremely tight labor markets of the current long expansion seem particularly beneficial for disadvantaged workers.

Not everything is coming up roses. A new study by the Center on Budget & Policy Priorities reports that the worst-off families (the poorest of the poor) have become even more impoverished in the wake of welfare reform. And a closer tie between growth and poverty entails the risk that poverty could soar during a downturn.

"Unless policymakers respond with help, such as public-service jobs," warns Haveman, "poorer workers could take a severe economic beating in a recession."

BUCKLING UP BEATS AIR BAGS

Seat belts are cheaper lifesavers

Anyone who doesn't wear a seat belt because his car has air bags is a fool. That's one implication of a new National Bureau of Economic Research study of the effectiveness of seat belts and air bags in saving lives by Steven D. Levitt and Jack Porter.

Past studies of the subject, the authors claim, have been flawed because of what statisticians call "sample selection bias." Because systematic data are collected only for fatal crashes, most studies of seat-belt and air-bag effectiveness rely on such data. But that means that crashes in which the use of these devices reduced injury severity so no one was killed aren't included in the sample analyzed. As a result, the benefits of the devices tend to be underestimated.

To get around this problem, the two economists draw on the same basic data—with one big difference. They use only data for cars involved in accidents in which someone in another vehicle is killed. This removes the bias in the sample selection, since people are no longer

included in the data simply because themselves were killed (they are counted when a person in the car is killed). Thus, those who were relatively unscathed are now as likely to be included as those who die.

Using this technique, the researchers find that seat belts are more effective in saving lives than most previous studies suggest, while air bags are ineffective. Specifically, they estimate seat belts reduce the likelihood of death in a crash by about 60% and air bags by 9% to 16% in frontal impacts. Using cost data for such equipment, they estimate that the cost per life saved with seat belts is about \$30,000 compared with \$1.6 million for air bags.

"The data," says Levitt, "suggests we could get a bigger reduction in fatalities by increasing seat belt use 10% than by equipping all cars on the road with air bags."

ESOP BENEFITS ARE NO FABLES

A study says they've paid off

Stock option plans may have gone off in the 1990s, but the gains from giving workers a piece of the action are exactly new. Between 1971 and 1997, some 380 publicly traded U.S. companies, averaging 17,000 employees each, adopted employee stock ownership plans (ESOPs)—fully defined contribution pension plans which invest in company stock and are available to all permanent workers.

What's more, such actions have paid off big, according to a new study by management consultants Hewitt Associates and Northwestern University's Kellogg Graduate School of Management. The study found that companies adopting an ESOP in recent decades had total shareholder returns that averaged 6.9 percentage points higher over the four years after the ESOP was set up than market returns of similar companies without ESOPs. And average annual returns for ESOPs were almost 3 percentage points higher over the same four-year pe-



JAMES C. COOPER & KATHLEEN MADIGAN

WILL THE FED KEEP TURNING DOWN THE FLAME?

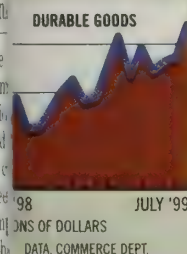
Neutral bias or not, it could see the need to act again this year

U.S. ECONOMY

Is this the end? After the Federal Reserve announced a rate hike on Aug. 24, the financial markets shed a long sigh of relief. The statement seemed to indicate that the Fed's move might be its last for 1999. Policymakers will remain on the sidelines only if the economy slows down and if labor markets stop improving further. Those are big ifs.

The Fed hiked the federal funds rate—the rate paid for borrowings between banks—from 5% to 5.5%. It also lifted the discount rate by a quarter point to 4.75%. Commercial banks quickly echoed the move, raising the prime rate to 8.25%.

THE BIG GAIN FACTORY ORDERS



The hikes were not a surprise. What snagged the attention of the stock and bond markets was the Fed's statement on its policy bias. A tightening bias would have meant that the central bank's next move would be another hike. Instead, the Fed kept a neutral bias in place. And significantly, the Fed said its actions so far "should markedly diminish the risk of rising inflation going forward." Under the more cautious wording of June 30, the day of the rate hike, this latest announcement strongly suggested that the Fed will not move at its Oct. 5 meeting. Policymakers may be following one of two tracks. They see a soft landing in the expansion's near future. Or the Fed is willing to gamble that the economy can continue at a sustained pace above 3% without generating inflation. And certainly, the latest data show that the economy began the third quarter at a rapid clip but with little price pressure. In July, consumers were still spending. Builders were busy. And durable-goods manufacturers saw the biggest jump in new orders so far this year (chart). But at the same time, consumer spending was rising at a benign 2.1% yearly pace.

But the Fed's moves have only taken back part of the three-quarter-point cuts put in place last autumn to assuage financial-market turmoil. That means the Fed is more likely to move quickly if the data hint that, instead of cooling, the economy is actually overheating. At that end, the Fed will continue to monitor the labor markets and the household sector. Unless con-

sumers downshift their spending, the economy will not slow, and the Fed will have to tap the brakes one more time this year.

Consumers clearly started the third quarter in a buying mood. Retail sales jumped 0.7% in July, led by a large advance in vehicle purchases. But excluding cars, store receipts rose a still-healthy 0.3%. Moreover, the July sales performance has been followed by weekly retail surveys suggesting sales have been solid in August, the traditional back-to-school season.

Many households are feeling extravagant because most consumer fundamentals are flashing the green light. The gain in the stock market so far in 1999 is benefiting nearly half of all households, and rising home prices are boosting the wealth of the two-thirds of Americans who are homeowners. Talk of a tax cut only adds to expectations of more money to spend.

Most importantly, though, the strength in the labor markets is probably the largest contributor to household euphoria. Initial claims for state unemployment benefits were just 287,000 in mid-August, and the four-week moving average was at the lowest in almost 26 years (chart). Fed Chairman Alan Greenspan has frequently mentioned the tightness of the labor markets—and its potential to trigger wage pressures—as a significant concern at the central bank.

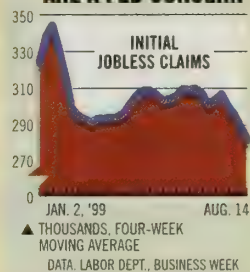
HEALTHY JOB PROSPECTS

and other helpful consumer fundamentals are also behind the prolonged stellar run of the housing industry. Starts rebounded 5.7% in July, to an annual rate of 1.66 million. And the August Housing Market Index stood at 72%. That's down from July's 74%, but it's still at an historically lofty level.

The rise in homebuilding came even as mortgage rates tipped above the 8% mark for the first time in two years. The rise was the result of a summer sell-off in the bond market as investors worried about the Fed's next move. Now that the bond market is convinced that the Fed will stand pat for a while, the yields on the 10-year and 30-year Treasuries have fallen. Mortgage rates should soon follow.

Keep in mind that housing is one of the fall guys for

TIGHT LABOR MARKETS ARE A FED CONCERN



Fed policy since interest rates control the affordability of home buying. A slowdown in housing activity will be one of the first signs that the Fed's desired soft landing is taking hold.

The Fed's other whipping boy is manufacturing. The factory sector, however, is doing better in 1999 than it did in 1998. Back then, slowing export growth and the General Motors Corp. strike tapped the brakes on output and caused massive layoffs.

Now, those drags have waned, and manufacturing is poised to add to gross domestic product growth again. Total industrial output jumped 0.7% in July, boosted by a heat wave-related surge in utility output. But factory output alone increased a strong 0.6%.

Looking ahead, manufacturing should strengthen further. Durable goods orders increased 3.3% in July, with a 7.3% jump in capital-goods bookings. The orders gain reflects the continued vibrancy in domestic spending as well as the need by many businesses to rebuild inventories, which are at record low levels relative to sales. In addition, export growth is starting to pick up as foreign economies recover.

BETTER EXPORT GROWTH alone, however, won't solve another concern for the Fed: the rising trade deficit. One by-product of the U.S. economy slowing down is that the demand for imports will also fade. That should help to whittle down the massive trade deficit.

Unfortunately, that was not the case in June. Though exports rose by a small 0.5%, imports jumped 3.9%. Consequently, the trade deficit for all goods and services mushroomed from \$21.2 billion to a record \$24.6 billion. Over the past year, imports have increased by a huge 13.7%, while exports have managed to rise just 2.1% (chart). Little wonder then that the monthly trade deficit has nearly doubled in a year.

What concerns the Fed is the financing of that soaring trade deficit. At some point, investors will question how the U.S. will meet its external obligations. The typical response is for the exchange markets to weaken the value of the debtor nation's currency. A weaker dollar means import prices will rise. And the Fed knows that falling import prices have played a key role in keeping overall inflation low.

As the Aug. 24 move shows, the Greenspan Fed remains intent on moving preemptively to keep inflationary pressures from gaining a toehold in this economy. So far, it has succeeded. But unless this economic changes from boil to simmer soon, the Fed's work will not be done in 1999.

WHY THE TRADE DEFICIT IS WIDENING



MEXICO

NO ASIAN FALLOUT HERE

Better-than-expected economic news has been radiating from Mexico lately. Output growth was stronger, and the jobless rate fell by more than was projected. Thanks in large part to NAFTA, Mexico has managed to avoid the Asian fallout that has tripped up so many other Latin American countries.

Mexico's real gross domestic product in the second quarter grew 3.2% from a year ago. Exports, especially to the U.S., remained a key source of growth, but domestic demand showed continued signs of recovery. Construction was up 5.7%, manufacturing rose 4.9%, and the service sector increased 2.9%. The latest GDP number, which followed

a 1.9% yearly gain in the first quarter, suggests that the economy will hit the government's target of 3% growth in 1999.

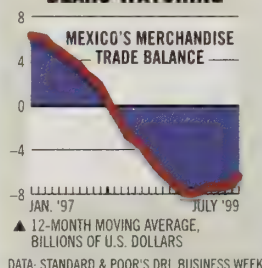
In addition, the monthly data indicate that the economy headed out of the second quarter on firm footing. In June, retail sales rose 2.8%, and industrial output increased 5.2% from a year ago. Lower interest rates and the export boom have meant some pickup in the labor markets. The unemployment rate in

July fell to a six-year low of 2.3%. However, increased domestic demand means that Mexico's trade deficit may begin to widen again. In 1998, the trade balance fell steeply in the red with a deficit of

\$7.9 billion for the year, after a small surplus in 1997. Thanks to the export resurgence, trade in 1999 has been improving (chart). In the first seven months of 1999, the deficit was running at a \$7 billion annual rate, with just a \$168 million gap for July. In addition to domestic demand worries, Mexico's trade situation may worsen if the Federal Reserve succeeds in slowing growth in the U.S.

Moreover, investors are worried about the strong peso, now trading at 9.35 to the dollar. The Central Bank appears willing to let the peso appreciate because the bank is determined to meet its 1999 goal of 13%. So policymakers are keeping interest rates high, and this strategy is working: Prices in the first two weeks of August rose by the smallest amount since 1994.

THE TRADE DEFICIT BEARS WATCHING



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Where ideas carry weight

THE BIG GUYS GO ONLINE

And the likes of Nordstrom may make it tough for the E-tail veterans

Most people may still be running their air conditioners. But the executives at Nordstrom Inc. have only one thing on their minds: an online Christmas. On Aug. 24, Nordstrom said it is creating a partnership with venture capital firms Madrona Investment Group and Benchmark Capital, backer of eBay and other Net stars, to create a new online business. The first goal is to get Nordstrom.com up and running in time to grab a slice of what looks to be an enormous cyber-holiday shopping season.

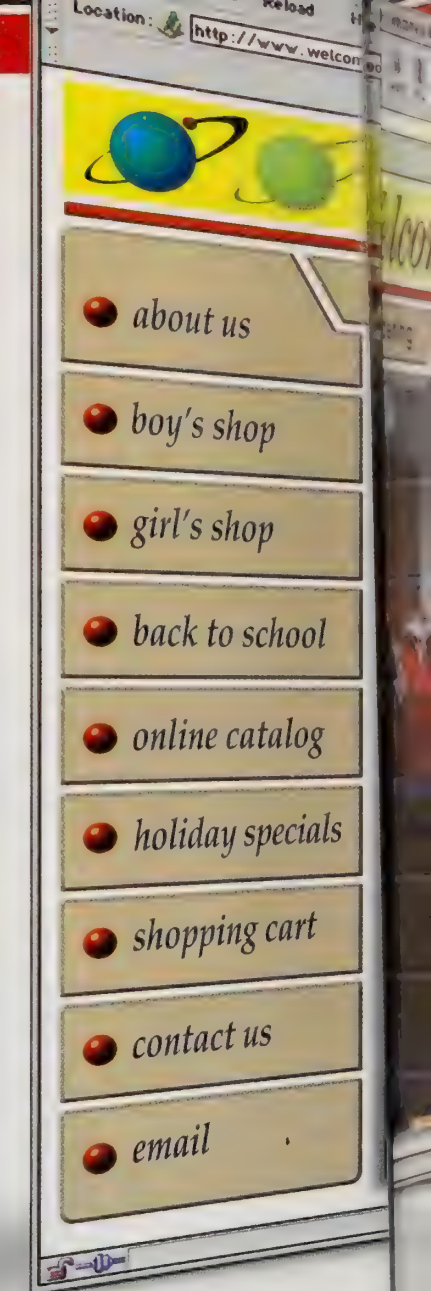
Sure, Nordstrom is another brick-and-mortar retailer trying to play catch up. And the track record isn't so great: When old-economy companies have tried to beat their Net rivals at the new game, it has usually been the upstarts that prevailed. But this year's E-commerce Christmas could establish a different pattern as everybody from J.C. Penney Co. to Wal-mart Stores Inc. gets deadly serious about Web selling.

Just ask L. Daniel Nordstrom, CEO of Nordstrom.com. "You can never assume you own your marketplace on the Net," he says. "The competition is startups totally focused on the Net." To make sure the new Nordie's venture is equally focused, the \$5 billion retailer realized it needed to act like a startup, too. With the venture partners, the retailer seeded the new venture with \$26 million in capital. Nordstrom will also tap the Web

expertise of the VCs and their portfolio companies. To plug the site, Nordstrom will spend \$17 million on a five-week ad campaign, its biggest single promotion ever. The goal: presenting a choice of 20 million pairs of shoes for Christmas.

MANY CHANNELS. Gap Inc. and Macy's have already shown that established retail brands can thrive in cyberspace. "The companies that are going to be winners on the Internet are those that already have established brand names and vendor and distribution networks and can reach consumers through multiple channels, not just one," says Gerald L. Storch, president of credit and new businesses for Dayton Hudson.

If the traditional retailers do get their act together, life may be a bit tougher for the Net-only retailers that grabbed the lion's share of E-business a year ago. "This will not be a profitable year for most of the Internet companies," says Gary M. Stibel, a principal of the New England Consulting Group. "They assume less competition than exists, and they assume greater loyalty



and higher purchases per consumer than they have yet been able to provide.

But even if the pioneers of online retailing have to share the market, the look forward to an exponentially expanding pie. Market researchers and industry analysts figure that online sales will double or even triple this fall.

Category Killers

Here is where cybershoppers say they plan to browse

● AUCTIONS

EBAY	74%
AMAZON	35
AUCTIONS.YAHOO!	32

● BOOKS

AMAZON
BARNES & NOBLE
BORDERS



\$3.5 billion in the same period last year, thanks in part to an explosion of new online shoppers. By yearend, Forrester estimates, 17 million U.S. households, or 17%, will be shopping online, up from 10 million a year ago.

For E-consumers, the growing competition for their cyberdollars could produce a greater variety of products, easier-to-use and more personalized sites, and such niceties as free shipping. Dayton Hudson, for instance, on Sept. 7 is relaunching its two-year-old site for upscale discounter Target with, it says, "100 times more merchandise," including toys, CDs and aromatherapy machines. And by November, Dayton Hudson will unveil nine more E-commerce sites, including Marshall Field's and Hudson's. "We're going to go in with our guns blazing," vows Storch.

CHOICES. Wal-Mart is also preparing a redesigned site with an expanded array of merchandise—including Santa suits and Christmas lights—this fall. And J.C. Penney, which disappointed customers last Christmas with its skimpy selection, says it will offer 200,000 items online by

Oct. 1, including its entire catalog line. And it will heavily promote the site in its catalogs and stores. "The companies that don't have a pretty strong Internet presence for this holiday are going to have a tough time catching up next year," warns Executive Vice-President Richard E. Last.

Perhaps nowhere will the contest between traditional and cybermerchants be more intense than in toys—even though online toy sales are expected to hit just \$250 million—less than 1% of the total toy market. Toys 'R'

Another Online Bonanza This Fall?

PERCENT OF CURRENT ONLINE USERS MAKING AN ONLINE PURCHASE

	1998 HOLIDAY	INTENDED 1999 HOLIDAY
1 BOOKS	7.2%	16.0%
2 MUSIC/VIDEO	6.3	16.4
3 SOFTWARE	4.8	12.6
4 APPAREL	4.5	11.0
5 COMPUTERS	3.2	6.2
6 TOYS	3.1	10.3
7 AUCTIONS	2.8	5.6
8 TRAVEL	2.6	4.3
9 ELECTRONICS	2.1	6.9
10 HOUSEHOLD	1.5	5.3
11 HEALTH/BEAUTY	1.4	4.3
12 SPORTS/SHOWS TICKETS	1.4	4.2

DATA: HARRIS INTERACTIVE

Us Inc., which split from partner Benchmark Capital over management issues, is still struggling to get its cyberfooting. But plenty of others are aggressively chasing leaders eToys Inc. and Amazon.com, which recently added toys to its store. Consolidated Stores Corp.'s K B Toys division bought tiny Brainplay.com this spring, and it's investing \$50 million in advertising over the next four months. Mattel Inc. has invested \$90 million to launch its own retail site in November. And Walt Disney Co. is spending \$45 million for a controlling stake in educational toy retailer toymart.com. Wal-Mart, the leader in toy sales, says it will have a vast toy selection online this Christmas, too.

But the entrenched E-tailer, eToys, will be hard to beat. It could grab as much as \$100 million in sales this year, analysts figure. "etoys is setting a high standard for excellence and customer experience that will become increasingly difficult for others to compete against," says analyst Lauren Cooks Levitan of BancBoston Robertson Stephens Inc. But, if Toys 'R' Us can get its cyber house in order, it could do well, according to the Harris Interactive poll: Among individuals planning to buy toys online this holiday, 64% plan to buy from Toys 'R' Us vs. 46% from eToys.

Another E-tailer with a seeming lock on its market is Amazon.com Inc. Of the shoppers who planned to buy books online, for instance, 80% said they intended to buy from Amazon, according to Har-

Harris Interactive survey of more than 800 online users finds that nearly half are planning to buy at least one item over the Internet this holiday, up from only 8% last year. That could mean \$9.5 billion in sales, estimates Harris Interactive. Forrester Research Inc. pegs fourth-quarter online sales at \$8 billion, up from

ELECTRONICS

27%

21

20

MUSIC/VIDEO

AMAZON

CDNOW

COLUMBIA HOUSE

37%

34

28

DATA: HARRIS INTERACTIVE

ris. In the music and video category, Amazon led again with 37%. Laurie J. Goldberg, a vice-president at the Cartoon Network in Atlanta, is a loyal Amazon shopper who won't even look at other book seller's sites. As Amazon moves into new categories, like toys and electronics, she says, "I would do my business with them. They make it so easy."

And Amazon this year is aiming to take away one of the biggest impediments to Web shopping: fears about sharing credit-card and personal information over the Internet. In the Harris survey, 65% cited such concerns as the key factors inhibiting online purchases. A revamped Amazon welcome page in-

Some old cybermall hands have formidable reputations and will be hard to dislodge

cludes an "our guarantee" button that leads visitors to security assurances and an option to phone in the last five digits of their credit cards.

CYBER REPS. One place Web veterans insist they won't be caught short this holiday is on such back-end systems as order fulfillment, warehousing, and customer service. Such problems plagued many E-tailers last Christmas. New York-based Bluefly Inc., an online retailer of designer clothes, is expanding its warehouse and creating an in-house customer service operation that will include more than 20 employees. Sears, Roebuck & Co. has added 45 online customer service reps. Last year, a single webmaster forwarded online requests to regular customer service agents.

So, can brick-and-mortar merchants really prevail on the Net? Short-term, Wall Street still sees the Net as more of a threat than an opportunity. On Aug. 25, Merrill Lynch & Co. analyst Daniel D. Barry lowered his ratings on a number of retailers, in part because of the "growing short-term psychological negative" of Internet competition—even though online sales will account for far less than 1% of the nearly \$3 trillion in U.S. retail sales in 1999. Longer-term, Barry and others see the Net as a positive for traditional merchants. But for now, let the games begin. Click.

By Wendy Zellner and Stephanie Anderson Forest in Dallas, with Kathleen Morris in Los Angeles and Louise Lee in San Mateo

BANKING

A PANIC OVER PLASTIC

Consumers are wising up about pricey late fees

There's something really scary stalking the credit-card industry: the specter of the enlightened consumer. That frightening creature, it seems, is behind the troubles at Bank One Corp., which issued a dire profit warning on Aug. 24. Consumers, Bank One disclosed, are giving up cards issued by its First USA unit in droves because of the company's increasingly aggressive policy on late fees. Bank One shares plunged 23% on Aug. 25, shaving \$15 billion from its market capitalization. But nearly all credit-card company shares fell, too, even though none has reported the same problem.

Yet. But the forces that are working against First USA, the No. 2 card issuer, may affect competitors, too. In recent years, credit-card companies have fiercely fought for each new customer, sending out billions of solicitations a year and cutting teaser rates to unprofitable

levels. Companies sacrifice profit at the front end in hopes of recouping when the teaser rates expire and collect significant nuisance fees on things as late payments. In Bank One's case, that strategy finally hit consumer resistance.

"It's created a consumer backlash," says Robert B. McKinley, CEO of Web.com in Frederick, Md., which tracks the industry. "No one is winning here. They are battling for the same customers."

POOR EARNINGS. Bank One blames its recent defections in part on a third-party processor that was late in crediting payments. But, bank officials also acknowledge an aggressive collection of late fees (including charges for checks received after the due date itself) didn't generate enough revenue to make up for customer defections. And the bank's chief executive, John B. McCoy, warned that the entire card business is coming

THE FED

THE CHANCE OF A THIRD HIKE?

That may depend on how overseas economies are

To hike or not to hike? That's the question facing the Fed's two quarter-point rate increases since June, Fed Reserve Chairman Greenspan must decide whether the 50 basis points will be enough to "markedly diminish the rising inflation going forward." Fed's stated goal for the Aug. 25 meeting. Or will a third hike be needed when the Federal Open Market Committee meets again on Oct. 5?

This was the big question Greenspan was pondering as he headed to Jackson Hole, Wyo., for the annual "Fed retreat." At last year's confab, Greenspan and other bankers saw pretty much the same forces in the U.S. that are driving inflation fears today (page 27): tight money, rapid growth and a strong





HEAT OF BATTLE

"The industry isn't growing at 12% anymore. We have to take share from others now"

are. "The industry isn't growing at anymore," he said. "We have to take from others now."

trouble at First USA shocked and. "A Bank One earnings disappointment is no surprise," says analyst P. Yates of A. G. Edwards & Sons. The fact that it came from First s." The bank, the nation's fifth-

largest, has repeatedly disappointed Wall Street with poor earnings, and its stock has vastly underperformed its peers. But First USA, which Bank One bought in 1997, has been a star performer in the credit-card industry. Under First USA CEO Richard W. Vague, a pioneer in direct marketing,

the company's 2.9% return on assets has consistently beaten the 2.3% industry average.

So, if this pillar of the market is shaky, analysts figure, others could be vulnerable to consumer wrath, too. Throw in higher interest rates in general, and the inevitable price competition on the Internet, and chances are card issuers will face even greater challenges. "The problem is bigger than Bank One," says analyst Michael L. Mayo of Credit Suisse First Boston. "Banks need to spend more to keep their market share."

The next move for issuers is unclear. They obviously face potentially conflicting objectives: get more customers and make the business more profitable, too.

Charles W. Peabody, analyst at Mitchell Securities Corp., worries that banks will be tempted to go down market, issuing cards to people with spottier credit histories. This strategy could be risky and ultimately not profitable. CardWeb's McKinley suspects issuers could also get tougher—although it certainly wouldn't endear them to customers—by cutting the grace periods before customers have to pay interest, for instance. No doubt, with growth slowing and rivals threatening, card issuers will have to do something.

By Gary Silverman in New York and Andrew Osterland in Chicago

deficit. But back then, they also growing problems overseas. Russia just defaulted on its debt, Asia was ing, and the liquidity crisis was ding to Latin America. Within , the Fed was no longer thinking rate hikes to cool an overheated economy; rather, it was pondering uts to stimulate U.S. growth and ff global recession.

ents overseas are also looming this August—but for different reasons. The recovery a and the strengthening rope have already made e for the Fed to hike without fear of plunging est of the world into rem. At the same time, economies' relative rths have been weaken-

e dollar. If U.S. consumption per- at current levels, that could not end the trade deficit to new highs, could also set a little fire under on as consumers pay more for all imports. That might tip the scale d a third hike.

st year, the dollar was rising it most major currencies, making ports cheaper. And, the deflation-

ary pressure that the global financial crisis placed on commodities helped keep U.S. inflation down even as labor costs rose. As Asia and Europe weakened, U.S. import prices fell 6.1%. The Goldman Sachs Commodity Index fell 39%.

This summer, those forces began reversing, to the Fed's dismay. As Greenspan put it to Congress on July 22: "Improving global prospects... mean that the U.S. economy will no longer be

which some regions are rebounding. On Aug. 13, Japan reported a torrid 8.1% annual growth rate in the first quarter. And Germany's Bundesbank said on Aug. 24 that growth in the 11 countries in the euro zone "will probably only get stronger" this year. True, the world is still awash in production capacity. And parts of Latin America—especially Ecuador—look shaky. But "the world economy is bouncing back more strongly

ly than people expected," says Fed watcher David M. Jones of Aubrey G. Lanston & Co.

What will the Fed watch before the October meeting? As always, it must focus on such domestic indicators as labor-market conditions and consumer demand. But a key

gauge of just how fast things are moving overseas will be Japan's second-quarter growth rate, expected before mid-September. Fed insiders wonder if seasonal factors inflated the first-quarter figures. Come October, Greenspan may be just as anxiously awaiting news on retail sales in Tokyo and jobs in Paris as on growth in the U.S.

By Laura Cohn in Washington

HIGHER TAB The global recovery has pushed down the U.S. dollar—which could reignite inflation as Americans pay more for imports

experiencing declines in basic commodity and import prices that held down inflation in recent years." San Francisco Fed President Robert T. Parry echoed the chairman in an Aug. 11 speech: "When we combine strong domestic demand with a pickup in demand from recovering economies abroad, the risk of inflationary pressures begins to build."

Fueling that concern is the speed at

STRATEGIES

MEET MICROSOFT'S NEW NET NAVIGATOR

Can ex-SGI chief Belluzzo steer it to dominance on the Web?

Microsoft Corp. has long sought two elusive quarries: a coherent strategy for its diffuse Internet businesses and a high-powered executive to implement it. Now, the software giant is bagging one of them: In early September, Microsoft will name Richard E. Belluzzo as its new Internet czar, company insiders confirm.

It's hardly an obvious match. Belluzzo, who oversaw Hewlett-Packard Co.'s print-

signing abruptly on Aug. 23, would be taking on one of the most difficult management assignments on the Net. Despite years of effort and unparalleled resources, Microsoft is not a force on the Net, though it's a major supplier of Net software. The company got into the online fray as a would-be challenger to America Online Inc., then turned its Microsoft Network into an Internet access service. It also jumped into content with

customers. For months, debate raged inside the company about what to do with its content and media assets. Options include spinning them off separately or as a group, perhaps with Belluzzo as chief. Or Microsoft may keep them but give them more autonomy. A trust stock for the properties, once considered, likely, has been all but ruled out.

In any role, Belluzzo, 45, would be a new face in Microsoft management. It has lost several top executives to retirement or startups, and Bill Gates, who considers says Gates is concerned with his team can handle Microsoft's growth. "The only guy at Microsoft who has run an operation the size of Microsoft before is Rick Belluzzo," says the industry analyst. "Bringing in some new blood is a good idea," says Morgan Stanley Dean Witter analyst Mary G. Meeker.

OLD PALS. Belluzzo is already well-known in Redmond. A former HP executive, he was a proponent of Windows while at HP and is friends with President Steve Ballmer and CEO Bill Gates. He is also a protégé of former HP executive and Microsoft director Richard Hackborn.

Microsoft may just be the place for Belluzzo to shine. After leaving HP, he left after Lewis E. Platt refused to adopt his aggressive plan to launch new businesses, including the Net. He ran the show at but wearied of the slow progress of turnaround. "It's hard to do a turnaround amid all this gold-rush fever

there," he says. "That was frustrating." At Microsoft, Belluzzo—who will own up to 2 million shares of Microsoft stock—would still be trying to forge a turnaround. But he'd have vast resources including access to Microsoft's \$17.2 billion cash kitty and a boss who's determined to succeed. "We're in a new Information Age, and it's time I become a part of that," says Belluzzo. Ditto for Microsoft.

By Michael Moeller, with Peter Elwood, in San Mateo, Calif.



BELLUZZO: Lots of cash and a boss who's determined to succeed

er business before becoming CEO of Silicon Graphics Inc., is a hardware guy with a flair for finance, not building businesses in cyberspace. "It's kind of disappointing," says a top analyst who covers Microsoft. "Microsoft needs someone who grew up on the Net. Don't you think they should have been able to find someone like that?"

In fact, the company spent months wooing others, including former Microsoft bigwig Brad Silverberg and former Walt Disney Co. cyber-czar Jake Winebaum. It even considered a bid for Excite@Home that would have let it put its president, George Bell, in charge of some Microsoft Internet properties.

Belluzzo, who vainly struggled to reverse Silicon Graphics' slide before re-

signing abruptly on Aug. 23, would be taking on one of the most difficult management assignments on the Net. Despite years of effort and unparalleled resources, Microsoft is not a force on the Net, though it's a major supplier of Net software. The company got into the online fray as a would-be challenger to America Online Inc., then turned its Microsoft Network into an Internet access service. It also jumped into content with

Microsoft and what has now become an array of unrelated Web sites. Belluzzo—who declined to confirm his new job—will be in charge of untangling and refocusing those properties. Company executives say the general drift of an emerging strategy is to focus mainly on making MSN a Web platform. Like Windows, it would be the foundation on which others would build their applications. The difference is that the applications would be Web sites or E-commerce services.

To pursue that strategy, however, Microsoft has to figure out what to do with its content areas. Travel site Expedia.com, Investor.com, Carpoint.com, and real estate site HomeAdvisor.com all compete with what Microsoft hopes will be its MSN

A WINDING ROAD

Microsoft's online strategy has seen a few twists and turns.

1995 The Microsoft Network, a proprietary online service, debuts.

1996-1997 MSN moves toward the Net, but Microsoft charges for online mag *Slate*. Launches travel site Expedia, MSNBC, and local entertainment guide Sidewalk.

1998 Removes all fees for Net content. Tries to unify its stand-alone Web sites, such as Expedia, under MSN.com.

1999 Reorganizes Internet holdings and rethinks entire Web strategy. Belluzzo hired to reshape online efforts.

BusinessWeek ONLINE

For an extended interview with Rick Belluzzo, the Sept. 6 issue of Business Week Online www.businessweek.com.



MUNICATIONS

NEW SATELLITE SYSTEM AMBERS ON THE LAUNCHPAD

Can Loral's Globalstar get out of Iridium's shadow?

nce Iridium LLC declared bankruptcy on Aug. 13, Bernard L. Schwartz has had his ear chewed by backers. They're worried about Space & Communications Ltd.'s billion satellite venture called Globstar, which, like Iridium, is aimed at providing wireless phone service anytime, anywhere. "My partners have been saying, 'You better make the damn thing work,'" says the Loral CEO.

Not just Loral's investors who are worried. The financial collapse of Iridium, which sought bankruptcy protection because it could not make debt payments, has cast a shadow over the future of the satellite industry. Sure, Iridium has special problems, including technology delays and major marketing gaffes.

Its high-profile belly flop has made investors take a look not only at Globalstar but also at similar systems designed to deliver a variety of voice and data services by satellite that have a \$20 billion riding on

them. Iridium spawned a large number of other projects on similar business models or more speculative, says John E. Pike, director of space policy at the National Association of American Scientists. "But now, these other

systems are in a hard time sustaining their financing."

Globalstar has tried mightily to distance itself from Iridium, which was marketed for elite "VIP roamers." Globalstar is aiming at giving well-heeled executives a service to cover areas where their cell phones don't work. It is focusing mainly on providing domestic service in developing countries, not international traffic, as Iridium had. And its pricing, probably about \$1.25 a minute, is one-third of Iridium's fee. Schwartz says the \$3.8 billion system needs only 200,000 subscribers to break even on an operating basis. Analysts see 30 million to 40 million people worldwide who would pay for global satellite phone service.

Globalstar is not the only satellite system tarnished by the Iridium debacle.

London's ICO Global Communications, which plans to use an array of 12 satellites to deliver low-cost telephony around the world, could fall short in its attempt to raise funds for a service launch in late 2000. In July, shareholders rebuffed a plan for a \$500 rights issue. Shares of ICO, whose partners include British Telecom, Hughes Electronics, and TRW, have plunged from 16 in January to less than 5, because of growing doubts about its ability to raise capital.

It's a different story in the emerging broadband arena—transmitting digital data and video at high speed. Satellite systems enjoy an edge at reaching remote or sparsely populated regions and in sending broadband data from one point to many. These might add up to a big market. By 2003, reckons Pioneer Consulting in Cambridge, Mass., satellite services will grab about 12% of a global broadband market worth \$26 billion.

"BACKBONES." Another satellite service that must overcome the Iridium question is Teledesic, a \$10 billion-plus scheme backed by Bill Gates and cellular pioneer Craig McCaw. Teledesic plans to loft 288 satellites to construct a web of two-way connections sending data as fast as 64-megabits-per-second. Teledesic says its charges will be comparable to those of fixed-line services when it begins operations in late 2003 or early 2004. But analysts question whether there is a business in selling broadband service to the remote areas that cable-TV or phone lines won't reach. "The villagers of Somalia do not appear to have the ability, let alone the willingness, to pay for something like this," says James E. Freidell, president of Daedalian Technologies Ltd., a consultancy in Littleton, Colo.

Indeed, in the long run, satellites may serve as "backbones" for broadband communications, but are unlikely to play a big role in the largest consumer and business communications markets where phone and cable-TV networks are ubiquitous.

"In the cities, fiber's so well established it will be hard for satellites to compete," says Christopher Baugh, an analyst at Pioneer Consulting.

For now, the future of the satellite phones may ride on the kickoff of Globalstar. If its business plan orbits successfully, it will prove that Iridium's failure was a fluke. If not, Iridium won't be the last satellite venture to crash and burn.

By Steven V. Brull in Los Angeles with Janet Rae-Dupree in San Mateo

Bird Bath

Which of these nascent satellite systems will survive?

PROJECT	SATELLITES REQUIRED	SYSTEM COST	NO. OF CURRENT SUBSCRIBERS OR START DATE	NO. OF SUBSCRIBERS TO BREAK EVEN*
IRIDIUM	88	\$5.2 billion	20,000	500,000
TELEDUSIC	288	\$10 billion+	2003-4	1 million+
GLOBALSTAR	48	\$3.8 billion	1999	1 million
ICO	12	\$4.5 billion	2000	500,000

* Reflects break-even at EBITDA basis

DATA: BEAR STEARNS; COMPANY REPORTS; BW ESTIMATES

COMMENTARY

By Lee Walczak

GEORGE W. ON TAXES: DON'T READ HIS LIPS

Right about now, George W. Bush would like nothing better than to change the subject. Enough babbling about his "youthful excesses" and possible cocaine snorting. Let's switch to some straight talk about what has been the dominant issue driving voters in recent Presidential elections: "It's the economy, pardner."

If only Bush could. While the Texas governor knows his precise pharmacological history but is leery of providing details, he has the opposite problem when it comes to economic policy. He'd love to give out the straight dope—he just doesn't know what Bushonomics is yet.

WINGING IT. Clearly, though, Bush's policy will be built around some kind of big tax cut. According to an aide, "Bush thinks like a businessman, not an economist." He wants a tax code that spurs growth, even though the economy is growing so fast that the Federal Reserve is jamming on the brakes. The hangup: His blue-chip economic advisers, led by American Enterprise Institute scholar Lawrence B. Lindsey and including such heavyweights as Stanford University economists Michael J. Boskin and John B. Taylor, can't agree on which taxes to slash or by how much.

So while the brain trust wrangles, the candidate is winging it on the stump. And plans for a major economic-policy address in September have been put off until late fall. "They just can't come to grips with a plan," says one insider. "When it comes to taxes, they're just making it up as they go along."

Recently, Bush pledged to sign either a House-passed GOP tax bill that cut rates 10% across the board or a Senate-House compromise that opted to trim a percentage point from each

bracket. Reaganesque reductions or within-bracket nips that are less controversial? Bush's aides refuse to say which he prefers.

On Aug. 14, Bush ventured into the tax thicket again and raised more questions. Interviewed by CNN commentator Robert D. Novak, he seemed to signal he would repeal President Clinton's 1993 tax increases—upper-bracket hikes that Republi-



cans widely predicted would throw the economy into a tailspin but instead put the budget on a path to surplus. Clinton's plan was built around creation of two new top brackets—36% and 39.6%. Elimination of those top rates at a time of wild prosperity would cost an estimated \$200 billion over five years and open the candidate to charges that Bushonomics mainly is compassionate toward the country-club set.

But aides privately doubt the candidate was suggesting the entire act be scrapped. "Does Bush aim to throw out all of Clinton's tax increases?" says an associate. "I don't think so. To him, it's just shorthand for cutting rates."

If so, it's shorthand that gives foes an opening. "Our increase in prosperity owes much to the 1993 deficit reduction act," says White House economic coordinator Gene B. Sperling.

"Calling for repeal is just another way of saying the top 1% of taxpayers should get a large break at the expense of lower interest rates and fiscal discipline." Meanwhile, Bush backs higher defense spending, new charitable deductions, and a big education reform push, which also could eat into the surplus—a surplus Hill Republicans are spending faster than you can yell "Big government."

These inconsistencies are unlikely to damage Bush's appeal to GOP primary voters, who love nothing more than tax cuts. But they could haunt Bush later if, as the Republican standard bearer, he must try to convince voters in the general election that he truly is a compassionate conservative. Although he also has pledged to help lighten the burden for lower-bracket taxpayers, he is again short on specifics about how.

Notes one GOP source:

"Rather than approaching this with an underlying philosophy, he's testing ideas to see what sells politically."

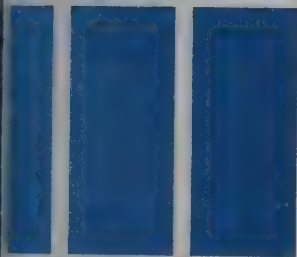
The muddiness gives Republican opponents a target. "Clearly, Bush is still undefined when it comes to his actual tax philosophy," snipes Bill Da Col, manager of Steve Forbes's rival GOP campaign.

One of these days, of course, Bush will lasso his economists and clarify his thinking about taxes. But will it matter to Americans who persist in telling pollsters their interests do not lie with big tax cuts? And will his aid for the working class be rendered insignificant by largesse for the richest taxpayers? For now, if you're looking for the definitive Bush line on taxes, don't read his lips. You'll only get more confused.

Walczak is Washington bureau chief for BUSINESS WEEK.

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MEDIA

FRASIER VS. 'STONE COLD' STEVE? LET'S GET IT ON!

Rivals challenge NBC's faltering lock on Thursday nights

For years, few things in TV Land have been as certain as NBC on Thursday nights. Starting with *The Cosby Show* in 1984, the network has ruled prime time's most prime night. But since Jerry Seinfeld and his not-so-merry band departed, NBC is slowly beginning to lose its grip on Thursdays. Even those hardworking doctors on *ER* can't seem to reverse the decline.

You might say, "Well, it's only one night." But on Thursday, NBC generates no less than 38% of its overall network revenues, selling ads to movie studios and other sponsors eager to prime consumers for the weekend. So when viewership drops 16% on Thursday as it did for NBC last year, executives pay attention.

So do rivals. Last year's dip gave many—particularly upstart networks UPN and the WB—hope that they could snatch some share this season. So UPN will be offering two hours of pro wrestling, starting at 8 p.m. and running through the *Seinfeld* slot now occupied by *Frasier* on NBC. The WB is moving its one-hour drama *Charmed*, which stars *Beverly Hills 90210* alumna Shannen Doherty as a youngish witch, from Wednesday night, where it was the network's second-rated show among women 18 to 34. ABC is putting up an hour-long show about twentysomething college friends from *Dawson's Creek* creator Kevin Williamson. And CBS is retooling once-popular *Chicago Hope* by bringing back its onetime star Mandy Patinkin, and creator David E. Kelley, in hopes of siphoning off some of *Frasier*'s older audience.

Each has a different target audience, but all threaten to chip away at the NBC lead. As defense, NBC will have to depend again on Kelsey Grammer and *Frasier*. The show, already in its seventh season, ended last season with ratings 26% below

Seinfeld, which commanded a regular audience of 21 million. *Frasier*'s is closer to 15 million. And NBC is counting on a new show following *Frasier* to carry viewers into the *ER* hour. But it would seem like a long shot. The show, *Stark Raving Mad*, is a sitcom vehicle for Neil Patrick Harris (*Doogie Howser, M.D.*), now a grown-up and neurotic literary agent.

No one is pre-



dicting that NBC is in danger of losing Thursday night ratings lead along this season. But there are clear, potentially big trouble ahead: Do a 5% increase in overall advertising for the coming NBC season, to \$2.2 billion, advertising sales on Thursday night flat, say insiders.

While much of the new Thursday programming is aimed at younger viewers, the biggest fight this season may be for males. They abandoned in greater numbers than women last year. Fox is moving its animated *Family Guy* from Sundays and its heavily promoted sitcom, which spoofs the antics of an egomaniacal movie producer. UPN is in-

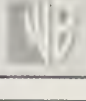
heavily to promote its two-hour wrestling block, and will spend an estimated \$10 million to plaster the sides of buildings with giant images of wrestlers like "Stone Cold" Steve Austin, and former wrestler Chyna.

FIRST AID. NBC's new team headed by longtime cable executive Scott Sassa are looking for a show to replace *Friends*, in the 8 o'clock slot, remain a draw. But to keep viewers tuned in until 11 p.m., they're throwing extra efforts into *Jesse*, a returning 'at 8:30 p.m. show has been assigned three new writers.

while, *ER* co-creator John Wells is turning after two years spent working on other projects. The cable channel has been overhauled and the new show will have regular guest stars Alan Alda and Rebecca DeMornay. And deejay heartthrob George Clooney show up for the November sweeps, too.

"Last year was not a one for *ER* or for Thursday nights," says NBC Entertainment President Garth Ancier. "We're feeling pretty good about the changes that we're making. And no matter what the guys are saying, this is still No. 1 night and the No. 1 show on television." But these are different times for network television, and NBC's competition betting that its Thursday lineup is already past its prime.

By Ronald Groves
Los Angeles

EVENINGS		
	9:00	9:30
	Chicago Hope More blood, guts, and insurance forms from former Wednesday night ratings winner	
	Frasier The exploits of two over-caffeinated psychiatrist brothers	Stark Raving Mad Doogie Howser reincarnated as a literary agent
	Wasteland A one-hour sex opera for twentysomethings by <i>Dawson's Creek</i> creator Kevin Williamson	
	Family Guy More cartoons for adults—watched by kids	Action A sitcom about an egomaniacal movie director
	WWF Smackdown Can revived wrestling mania flatten the network stars?	
	Charmed Former Wednesday night youth-oriented hit starring Shannen Doherty	

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COMMENTARY

By Diane Brady

CHRIS WHITTLE'S NEW IPO DESERVES A D-

Chris Whittle's ambitious quest to make money running public schools should be about to pay off. After all, the public is clamoring for charter schools and other schemes to improve U.S. education. And the 52-year-old entrepreneur's Edison Schools Inc. has been working on such issues for a decade. But the fine print on Whittle's preliminary prospectus to issue \$172.5 million worth of Edison stock—including details about executive compensation and the founder's personal finances—suggests that this deal deserves to flunk.

The question is when it will start to pay off. On the positive side, the loss per student, before those stock charges, has fallen from \$3,927 in 1996 to \$603 last year, which suggests that Edison is starting to realize some economies of scale. Whittle won't say how many schools or pupils it needs to break even.

The prospectus cites a need for 20 new principals and 750 teachers this fall alone. And, though there's a teacher shortage, Edison is trying to fill jobs with longer days, fewer holidays, and more pressure to perform

with a relatively modest salary to hit \$296,636 last year. But the company also gave Schmidt, now chairman, low-interest loans amounting to \$1.8 million, which he doesn't have to repay until next year. He also gets \$2.5 million if he loses his job, plus up to two years' salary.

SMALL POTATOES? Whittle's base salary last year was the same as Schmidt's, but he has also received more than \$1 million from Edison for "professional services" since 1993. The sole shareholder of WSI Inc. The prospectus also states that the company will offer Whittle a \$5.6 million loan to buy 1.45 million shares at \$1.50 each and pay any related taxes. Whittle will see many of those shares vest if the IPO commands at least \$8 a share. The price sounds low, when you consider that WSI has options to buy 850,000 common shares at \$10 each and another million at \$20 each. While the company has not yet disclosed how many shares it will sell or when, both Whittle and Schmidt are expected to walk away with millions.

O.K., that's small potatoes in the era of overnight Internet billionaires. What should trouble investors, though, is the fact that both Whittle and WSI have pledged "all of their direct and indirect interests in Edison to secure personal obligations" for an undisclosed amount to Morgan Guaranty Trust Co. If Whittle doesn't have the liver when those debts come due Aug. 30, the prospectus says, the shares will fall into the bankers' hands. That could give Whittle's bankers a big say in Edison's future.

Perhaps none of this would matter if Edison were clearly about to pay off. The company claims that its students gain an average of five percentage points on standardized tests. The American Federation of Teachers, among others, has challenged such claims with tests that point to more mixed results. Whittle may prove that Edison can pay off. But the brighter students of the market will find better returns elsewhere.



SLOW STARTER: Edison runs 51 schools but has yet to show a profit

Edison runs 51 public schools now and plans to have 77 under contract this fall. But President and CEO Whittle has not proved that he can make a profit from privatized public schools. As the prospectus acknowledges: "We are not certain when we will become profitable, if at all." It shows that Edison lost almost \$51 million on revenues of \$132.8 million in the year ending June 30, including a \$22 million charge to reissue stock options. Since inception, it has lost \$112 million. Edison needs cash—and fast. So does Whittle, who must repay a personal loan by Aug. 30 or risk losing part of his 15% stake in the company.

than at ordinary public schools.

Some analysts argue that, at best, Edison will be lucky to get a 3% profit margin from school operations. "It's not at all evident that any of these places will make money," says Max B. Sawicky, an economist at the left-leaning Economic Policy Institute. (Teacher unions have been Edison's most vocal critics.)

Edison, which signed its first schools in 1995, was to be Whittle's comeback after he sold debt-plagued Whittle Communications to K-III Communications Corp. in 1994. He persuaded former Yale University President Benno C. Schmidt Jr. to become Edison's first CEO in 1992

Connecticut Bureau Manager
Brady covers financial markets

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EDITED BY MARK FRANKEL

CHIPMAKERS SPARK A PC PRICE WAR

TIME FOR A MICROPROCESSOR price war? Just two weeks after Advanced Micro Devices unveiled its new top-of-the-line Athlon chip—including a 650-MHz version that outruns Intel's fastest Pentium III—Intel struck back Aug. 22 with price cuts of as much as 41% on its zippiest models. The chip giant left prices unchanged for its less powerful Celeron chips. Analysts were surprised by the size of the Pentium III cuts—Intel's prices are now less than 10% higher than AMD's—which are meant to spur holiday PC sales and keep AMD on a short leash. PC makers, including Hewlett-Packard and Dell Computer,

quickly translated the lower prices into discounts of up to 17%. Behind the price cuts lurks the industry's uneasiness over signs of slowing growth. Researcher Dataquest expects PC sales this Christmas to climb 13.3%, their lowest rate in at least five years.

FILENE'S BASEMENT SEEKS PROTECTION

AFTER 91 YEARS OF SELLING upscale togs to the bargain hunters, discount pioneer Filene's Basement filed for Chapter 11 bankruptcy on Aug. 23. The Wellesley (Mass.)-based chain fell victim in part to outlet malls, which slowed the supply of famous brand-name clothes, as well as stiff competition from TJ Maxx and Wal-Mart, which enjoy more leverage with manufacturers thanks to their larger size. Filene's Basement's 51 stores, mostly in New England, will remain open with \$135 million in temporary financing from GE Capital and Paragon Capital.

NOW YOU CAN TRADE FROM 6 TO 8 P. M.

INDIVIDUAL INVESTORS AT last got to indulge in after-hours trading when MarketXT, an electronic trading system formerly named Eclipse Trading, launched its nightly 6-to-8 p.m. (EDT) trading sessions on Aug. 25. Customers of two online brokerage firms can place orders for up to 5,000 shares in 200 actively traded stocks, trading with other investors or three market-making brokers. MarketXT's application to launch after-hours retail trading earlier this year ignited a flurry of similar proposals by competing systems, but the New York Stock Exchange and the Nasdaq market have put off evening hours until sometime next year.

HEADLINER: DAVID DUNN

ZIP GOES THE CEO

The revolving door keeps turning at Iomega, the beleaguered maker of data-storage devices, where Chairman David Dunn can't seem to keep a chief exec in place for long. CEO Jodie Glore, who was brought in only 10 months ago to replace Kim Edwards, abruptly announced his departure on Aug. 22 for "personal reasons." Dunn, who has switched chief executives seven times since co-founding Iomega in 1980, has stepped in as acting CEO until another new chief can be found. Unlike Edwards', Glore's resignation does not appear forced. In a letter to shareholders,

Dunn said the move was not because of a lack of confidence in [Glore].

It's unclear how long Dunn, 68, will pull double duty at Iomega, which makes popular and Jaz storage drives. It will probably be a while. Iomega must compete with less troubled tech companies for top talent. Just two weeks before Glore's departure, the company finally hired a new chief financial officer and a treasurer after 14 months of looking. Dunn might be holding down the fort for long time.

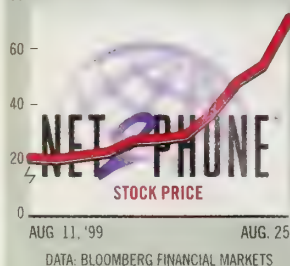
By Janet Rae-L...



CLOSING BELL

NET2PHONE SOARS

The stock of Net2Phone soared 50% on Aug. 24 and 25 to close at \$70 after the New Jersey-based Internet phone-service provider announced back-to-back strategic relationships with key partners. First came a deal that No. 1 PC-maker Compaq Computer would include Net2Phone with its Presario line. Then Sprint agreed to offer the company's low-cost service to Asia. "We offer more than just a cheap phone call," says CEO Howie Balter. "We are collapsing the world with the Internet."



MICROSOFT CAN SHIP JAVA, A COURT RULES

THE FEUD BETWEEN SUN Microsystems and Microsoft over Java took a twist on Aug. 23 when the U.S. Ninth Circuit court overturned a lower court's ruling that barred Microsoft from shipping any products containing Sun's Java technology. The decision, while a boost for Microsoft, also signaled that Sun was likely to prove Microsoft violated the contract it had signed to license Java. Sun first filed suit against Microsoft in 1997, charging that it was trying to undermine Java's ability to run across multiple computer platforms.

A LAWSUIT SOURS A COPPER DEAL

THE BROUHAHA OVER THE copper industry's consolidation continues to spread as

more than six shareholders sued to block pending \$2.2 billion deal of Cyprus Ammax and Asarco. That would help industry leader Phelps Dodge to break up the company and buy the two companies in a \$2.7 billion bid to create the world's largest copper producer. The deal was the crowning achievement of Phelps Dodge chairman Yearly, 63, who has announced his intention to retire next May.

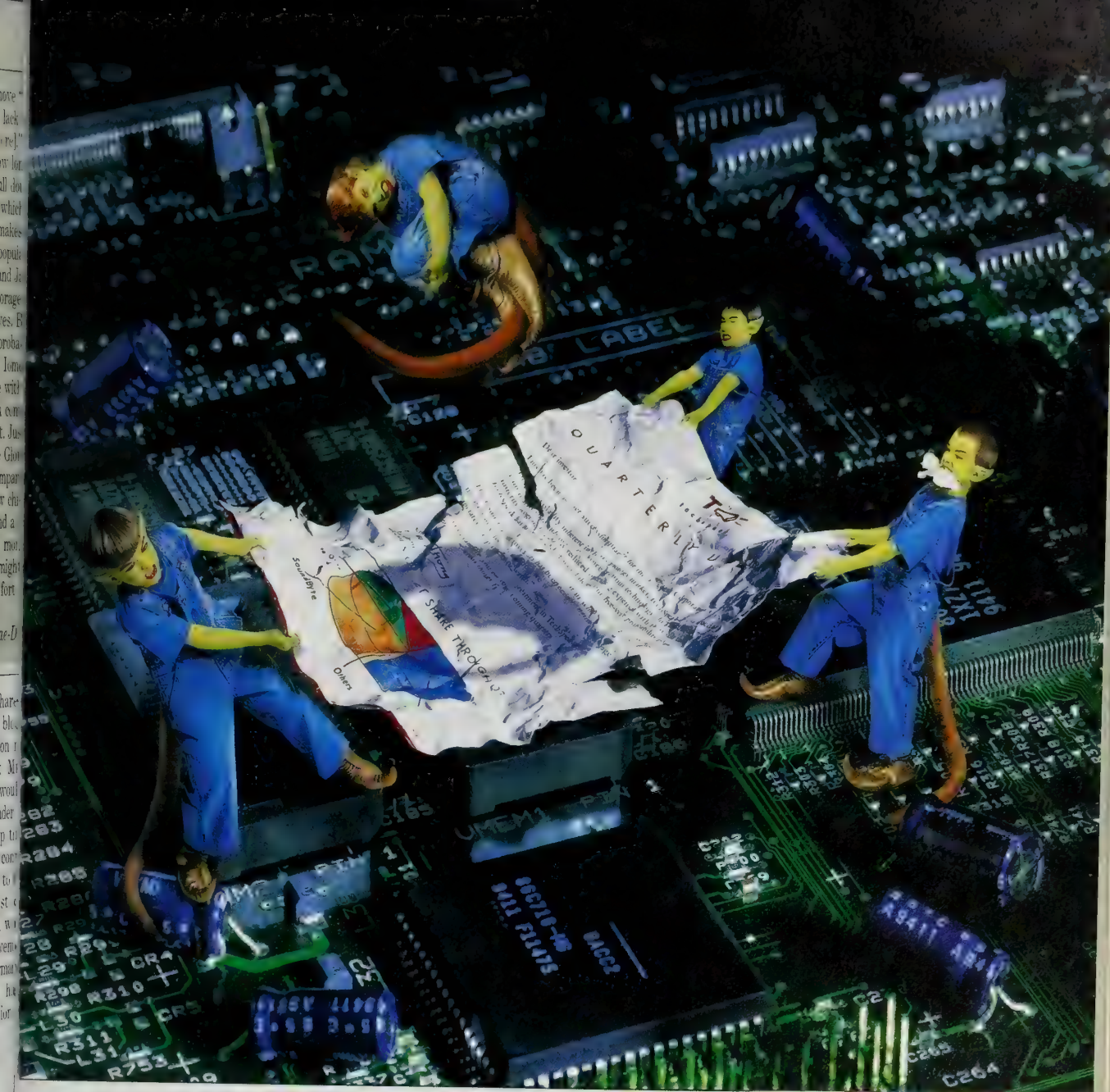
ET CETERA...

- Federal agents in busted 44 AA and Lu workers for drug smuggling.
- A week after closing to acquire Raychem, axed 2,200 Raychem workers.
- Toronto investment Onex plans to buy and Canada's two top airlines.
- 3Com and Siemens of their planned \$100 telephone joint venture.

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BY PAULA DWYER

EVEN BIG LABOR ISN'T SURE ABOUT BIG AL

When Big Labor held a powwow in Chicago in early August, Vice-President Al Gore sent his personal emissary, President Clinton, in search of an early union endorsement. The answer: not now. It was the second time in four months that the AFL-CIO rebuffed attempts to win an endorsement for the Veep. The official union line is that locals need more time to meet with candidates. Says AFL-CIO President John J. Sweeney: "We want to make sure our members are solidly behind whoever we endorse."

But there's another reason for labor's diffidence. Gore's campaign so far has left a lot of union officials unimpressed. The industrial unions want pledges that worker rights—to join unions and bargain collectively. And by keeping Gore on tenterhooks, labor figures it can win more concessions. That's why the unions are playing footsie with Bill Bradley, whose free-trade views closely resemble Gore's but who seems willing to offer more enticements.

The tussle for labor's seal of approval shows just how crucial union money, door-knocking, and voter turnout are in the early contests. While union membership overall is declining, union households are expected to cast some 30% of the vote in the Iowa caucuses and 25% of the vote in New Hampshire.

No one understands this better than Gore. On Aug. 5, within days of the AFL's rejection, the White House, at his urging, issued a "steel action program" to deal with the two-year-old steel-import crisis that has cost 10,000 jobs. The plan calls on the U.S. to open talks with Japan, Korea, and Russia over cutting capacity—and to monitor more closely subsidies that some overseas steelmakers may be getting. Gore's goal: show he can help steelworkers while maintaining free-trade principles. But labor experts say his real aim is to send a signal to auto workers, who worry they'll fall victim to the current surge in car imports.

Bradley is also displaying his labor bona fides. Like Gore, he backs a minimum-wage hike and favors measures to make union organizing easier. In an Aug. 25 speech to the national Brotherhood of Painters & Allied Trades, Bradley endorsed "common situs picketing," which would allow pickets of an entire construction site even if some trades have not voted to join the picket line. And in the fall, he will unveil the most potent weapon of all in his bid for support—a universal health-care plan.

The Teamsters could be the wild card. Teamsters leaders say new President James P. Hoffa is loath to endorse Gore, whose '96 reelection campaign worked closely with Hoffa's predecessor and archenemy Ron Carey. The union has not decided whom to endorse—on whether it will be a Democrat or a Republican. But spokesman Chip Roth says Bradley is winning himself by backing a key Teamsters issue: the postponement of Mexican truck drivers at the border between Mexico and the U.S. Under NAFTA, the border is set to open on Jan. 1. So far, Gore has been silent on the truck issue. **POLL WOES.** Is labor's endorsement in the cards? Bradley hopes so. Ultimately, Gore is expected to win over the AFL-CIO, possibly when it meets at a biannual convention on Oct. 7-13 in Las Vegas. But even if he does, he can't expect union members to automatically follow suit.

"The problem isn't with the leadership, but with the rank and file," says Ed Sarpolus of Michigan pollsters EPIC-MRA.

Gore has another problem as well: the perception that he can't beat GOP front-runner George W. Bush. "Electability" is becoming an issue for Gore," adds Sarpolus, whose July poll of voters in heavily unionized Michigan put Bush at 50%, Gore at 35%. Among union members, Gore came in ahead but barely, at 46% to Bush's 36%. No wonder Bradley thinks he can win the right to wear the union label.



TALKING to Iowa union reps

CAPITAL WRAPUP

RATE HIKES AND THE WHITE HOUSE

► Some Fed watchers speculate that Alan Greenspan & Co. raised rates on Aug. 24 in part to avoid any politically sensitive hikes in 2000, a Presidential election year (page 32). Better for the nonpolitical Fed to act now, the theory goes, so that hikes aren't necessary in the heat of a campaign.

But according to an analysis by Wall Street consultant R. H. Wrightson & Associates, the Federal Reserve hasn't been shy about taking action in Presidential campaign years. In fact, going

back to 1960, rate adjustments have been the rule rather than the exception. And Democrats might want to keep their fingers crossed: The party occupying the White House usually wins if rates go up. In 1972, '84, and '88, the Fed hiked rates by at least half a point—and Republicans kept control of the White House. In 1960, '76, '80, and '92, rates dropped—and voters swept the White House clean. Only in '64 and '96 did incumbents Lyndon Johnson and Bill Clinton get



BUSH: Swept out

to ballyhoo rate cuts while on the hustings and go on to win.

Why the seeming anomaly? Raising rates are a sign of a strong economy, which is always the best news for incumbents. And when the nation is so prosperous that the Fed can't avoid raising rates, voters will generally be inclined to reward the party in power, says Wrightson. So if the Fed keeps tightening in the new year, maybe there'll be another Democrat in the White House yet.

By Laura Co

Back when it was scarce, information was power. But now that the total volume of data doubles every nine months, information is as likely to devour your company as give you a competitive edge. Fortunately, a Storage Area Network (SAN) solution from StorageTek has built-in intelligence to help you manage information, gain access to information, and make information powerful again. For intelligent SAN solutions, visit: www.storage.com/edge



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JAPAN

REBUILDING THE BANKS

Megamergers are just the beginning

A mad mating dance is sweeping Tokyo's once-placid Ohtemachi banking quarter. Ever since the scary collapses of Yamaichi Securities, Long-Term Credit Bank of Japan Ltd., and Toho Mutual Life Insurance in the past year, every financial exec in town has been in crisis-management mode. Now, hardly a week passes without news of a major deal, alliance, or merger in Japan's once-cosseted financial industry.

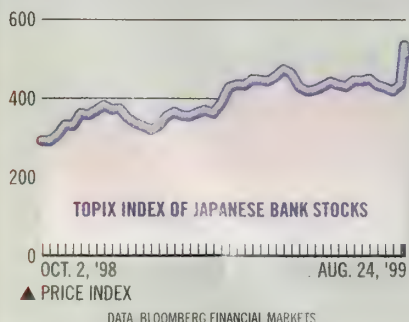
The latest deal is by far the biggest to date. On Aug. 19, three money-center banks, Industrial Bank of Japan, Dai-ichi Kangyo Bank, and Fuji Bank, unveiled plans to form the world's biggest financial holding company, with \$1.2 trillion in assets. The monetary Godzilla will dominate Japanese retail, wholesale, and investment banking, and will make about 30% of all corporate lending. It will pit itself against the world's best. "We aim to rank among the top five [global] lenders in terms of capital, profitability, and services," says Masao Nishimura, president of Industrial Bank of Japan Ltd., who will co-chair the operation with Fuji Bank President Yoshiro Yamamoto.

Such ambitions would have alarmed rivals from Wall Street to Frankfurt a decade ago. No longer. Now Japan's banks, lumbered with \$600 billion of bad debts, inspire more pity than awe abroad. About a year ago, Japan's top banks were seen as such poor credit risks that they had to pay a huge one percentage point more than Western banks to borrow dollars on global markets. Ladles full of government cash—\$500 billion of capital and deposit insurance for ailing banks plus \$200 billion in aid to bolster their customers—saved the banking system from collapse.

RICKETY INSTITUTIONS. Japanese banks are not home free, however. The government may have to rein in some of its life support to banks because overall government borrowing now equals 100% of gross domestic product. Bad debts continue to grow apace. Impending accounting rule changes will flush out billions more of bad corporate debts now hidden in the books of subsidiaries. They also will lift the veil on \$660 billion of unfunded pension obligations that will cast a pall over the creditworthiness of some of the banks' customers.

Meanwhile, some of Japan's regional banks are rickety. And there are big worries about the health of the nation's massive life insurance industry, which is squeezed between large-scale policy cancellations and a growing inability to cover from premium and investment income. All the same, Tokyo Stock investors embraced the Aug.

Restructuring Has Bank Stocks Soaring...



... But Big Challenges Still Loom Ahead

MONEY-CENTER BANKS Bad loans are still increasing sharply. New merged players still need years to catch up with Western financial giants in profitability and financial knowhow.

REGIONAL LENDERS Four have been shut down this year, and work is just beginning at others. Deposits are shrinking as savers fret about the end of 100% deposit insurance in April, 2001.

LIFE INSURERS Big failures of Nissan Mutual and Toho Mutual have cast a shadow over other giant insurance companies. Policy cancellations are up, and many insurers don't earn enough on investments to cover promised returns on policies.

DATA: BUSINESS WEEK



700 branches. But the cuts will be spread over five years—hardly the pace of a new breed of Japanese financiers who Yanagisawa wants to see “make decisions quickly with a real sense of crisis.”

The deal isn't even a full-blooded merger. Once the holding company is formed next year, the banks will take two years to gradually inject their operations into it. Such activities as securities operations might be merged. But most work will be carefully carved up between the banks.

Foreign employees will get the chop first as the new outfit eliminates duplicate branches abroad.

But the biggest potential for cost savings is in Japan, where DKB's and Fuji's branch networks overlap extensively. The new bank's leaders are leery of stepping into this hornet's nest. And with good reason: Japanese bank mergers often result in turf battles and failure to deliver promised savings. But unless managers act boldly to hack out domestic fat, the Financial Reconstruction Committee's reform

plans will fall flat. Pessimistic analysts warn that the deal could turn into a reincarnation of the Ministry of Finance's notorious “convoy system,” by which dud banks were coupled with healthier ones rather than closed.

Since being tapped by Prime Minister Keizo Obuchi last December, Yanagisawa and his 50-strong team of bank examiners and lawyers have attempted to make a break with the past. They have nationalized two giants, Long-Term Credit Bank and Nippon Credit Bank Ltd. If they succeed, Japan's sprawling banking industry will be slimmed down to a handful of sleek global contenders and a larger group of smaller banks that focus on domestic business or spe-

Bank stocks soared 20% in the following the merger's announcement and have now doubled in value October (chart). That euphoria was rewarded if the merger proves the first step in a huge consolidation of Japan's financial industry. Hakuo Yanagisawa, head of Japan's Financial Reconstruction Committee, certainly wants to see just that. If he gets his way, Japan's 18 money-center banks will be packed into four or five \$1 trillion behemoths that can compete globally.

BUNCH. At first blush, the new banks seem an odd bunch to achieve the goal. Each has flaws. Dai-ichi Kangyo Bank Ltd. is tainted by recent scandals over payoffs to racketeers. Fuji Bank Ltd. lost \$3.5 billion in the year ending Mar. 31, 1998, after making large write-offs. Even IBJ, the soundest, has lost government guarantees on the near bonds it uses to finance itself. Be sure, the new combine towers above the likes of New York-based Citicorp or Germany's Deutsche Bank in size. But it will be years before the new bank can match the smarts, reach, or

Accounting rule changes will flush out billions more in bad corporate debts now hidden in the books of subsidiaries

profits of rivals. Japan's money-center banks are the least profitable in the industrialized world, racking up measly 2% to 3% returns on equity, vs. a typical 15% to 20% in the U.S. Lousy lending is partly to blame—but so is the woeful tardiness of Japanese lenders in grasping how to use mergers to spread huge information technology costs over a bigger base, cross-market products from mutual funds to insurance on a global scale, and ruthlessly cut costs.

True, the trio's leaders promise to ax expenses by \$1 billion. They plan to meld all their computer operations, for instance. Added to that, about 6,000 jobs will disappear from their combined 35,000 payroll, along with 150 out of

cialties such as asset management. Up to a third of Japan's 100-plus local banks will be merged or shut.

Yanagisawa is being helped by Japan's 1996 Big Bang financial reforms, which only now are succeeding in tearing down barriers between banks, brokers, and insurers. Foreign players like Fidelity Investments, GE Capital Services, and Goldman Sachs are adding to the pressure by making inroads into mutual funds, insurance, and asset management. New York investment group Ripplewood Holdings has even set up a \$13 billion fund for its bid to buy LTCB from the government.

COZY TIES. Still, progress will be painful and slow. Urgent work in identifying viable regional lenders has barely begun. In April, 2001, the government will stop fully guaranteeing all bank deposits. Instead, it will set an \$86,000 limit per account. The change could prompt runs on the weak lenders that lack adequate capital reserves. But government will still play a large role in banking: Its agencies guarantee 12% of all loans in Japan, while the Bank of Japan is now the main intermediary in the local commercial paper and inter-bank markets.

Despite the hurdles facing reformers, though, the bad old days of state-directed credit may be numbered thanks to budget constraints. The emergence of shareholder capitalism and internationally accepted lending and accounting practices could turn Japan's postwar economic model on its head by loosening collusive ties between banks and big companies. "Japan really is changing now," insists Yoshifumi Nishikawa, president of Sumitomo Bank Ltd. "The old rules won't come back."

Old rules? Consider this: At the start of the decade, the Ministry of Finance had undisputed control over every bank, broker, and life insurer. Top lenders even maintained bureaus that wined and dined MOF bureaucrats to trawl for in-



YANAGISAWA His goal: To turn the 18 money-center banks into four or five behemoths

side dope on rivals or to lobby to keep foreign players out. As recently as a year ago, such cozy ties allowed the nationalized LTCB and Nippon Credit to set up dummy affiliates.

Bank lending used to be all about relationships, not risk assessment. Even after Japan's bubble economy collapsed, the easy lending continued until late 1996. Lax accounting practices made it devilishly tough to figure out whether a borrower was really solvent or not.

Once accounting reforms start to click in this year, giving bankers better numbers to work with, institutions may finally get their risk assessment skills up to snuff. Then they could become less reliant on low-margin lending to big corporate customers. At Sanwa Bank Ltd., new President Kaneo Muromachi sees no future in such business. Instead, he is forming a comprehensive tie-up with three insurance companies, as well as Toyo Trust & Banking Co. and broker Universal Securities Co., to offer products such as 401(k) plans to corporate customers. And on Aug. 24, Sanwa announced plans to sell mutual funds managed by Morgan Stanley Dean Witter.

Muromachi is also

trying to get middle managers to creatively rather than passively ing orders from the top. "We no longer cruise along. I need ideas variety of people," says Muromachi. Muromachi now reads a dozen messages a day from his staff. After a roadshow in New York last he even asked global investors vice on refining his strategy.

If managers such as Muromachi revive Japan's banking system, the potential payoff will be substantial. It needs to triple the return on its size savings pool, to 7.5%, from Deutsche Bank Asia economist Courtis, to pay the costs of caring its graying population.

"NONSENSE." And instead of throwing good money after bad into old and inefficient companies, banks could back Japan's emerging entrepreneurs. Why Internet kingpin and Soft Corp. founder Masayoshi Son is working with Nasdaq to set up a new over-the-counter market in Japan next year takes about 20 years for a young company to have an initial public offering in this country," says Son. "It's nonsense. He knows: Two decades ago, he begged bankers to finance his then-lagging software-distribution company."

Japan's backward financial system cost the economy dearly. The hope is that out of the ruins of the old Japan something new and more dynamic will emerge. The creation of the first trillion-dollar bank might just signal Japan's long financial nightmare is finally drawing to a close.

By Brian Bremner in Tokyo

Japan's First Trillion-Dollar Bank

Together IBI, Dai-Ichi Kangyo, and Fuji Bank have loads of clout ...

ASSETS \$1.2 trillion

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MALAYSIA

LOOK, FOLKS, NO CAPITAL CURBS!

Mahathir bets big that investors will stay when controls end

Mahathir Mohamad's moment of truth is about to arrive. On Sept. 1, the Malaysian Prime Minister promises, he will lift the controls on capital movements that he imposed a year ago to protect his country from the financial meltdown that swept Southeast Asia. The move will enable foreign investors and banks to pull billions of dollars out if they wish to, and

ringgit at around 3.80 to the U.S. dollar should there be a rush to the exits. "There will be no explosion," predicts Francis Yeoh, a real estate mogul who is close to Mahathir. "The fuse is damp."

If Malaysia can skate through the coming months with minimal damage, then Mahathir will be able to boast that he saved his nation from a meltdown by defying free-market convention. That,



possibly spark market turmoil. This test of investor confidence comes as Mahathir is preparing for an election that will pit his embattled ruling party, the United Malays National Organization (UMNO), against a resurgent opposition.

Dark days for Mahathir? Don't bet on it. As usual, the crafty 73-year-old has a plan that could convert a challenge into political victory. He hopes to keep the markets buoyant by pushing the well-endowed national pension fund and other government vehicles to pump enough new money into local stocks to offset any funds yanked out by foreigners. Meanwhile, Bank Negara Malaysia, the central bank, is prepared to use its \$32 billion in foreign reserves to defend the

This market test comes just as the embattled ruling party prepares for elections

MAHATHIR: ON THE STUMP IN PENANG

combined with a surprising 1.4% economic growth in the first six months of the year, could disarm his critics at home and abroad—and keep him in power after the election, which he must call sometime before June, 2000. Mahathir is even getting help from Wall Street. Morgan Stanley Capital International (MSCI) expects to reinstate Malaysia in two emerging-market indexes used by many Western portfolio managers.

Of course, the downside risk is enormous. A recent private survey of brokers in Kuala Lumpur found that one in four fund managers plans to pull his money out on Sept. 1. That's when penalties ranging from 10% to 30% on repatriating money brought into Ma-

aysia expire. Brokers estimate that \$1 billion could leave Malaysia. That jolt the stock market and put pressure on the ringgit. If the markets suffer psychological damage could hurt UMNO's candidates. A healthy stock market also is vital to UMNO because of the party's key backers own stakes in listed companies.

Propping up the Kuala Lumpur Exchange shouldn't be too difficult at least for a while. Many foreign investors have already shifted their funds to equities and parked them in local deposits, which they can do without paying penalties. Foreign funds account for just 7% of the market capitalization of \$140 billion. "Everyone wanted out of this market has out already," says a local fund manager. Also, the \$38 billion Employee Provident Fund, which collects 21% of a Malaysian's monthly salary, could prop up the market by buying more of the handful of stocks, such as Telekom Malaysia and electric utility Tenaga Nasional, that account for the bulk of market capitalization.

RINGGIT'S DEFENSE. Malaysia also is in decent shape to protect the ringgit. Thanks to plunging imports during the crisis, Malaysia has a \$9.5 billion current account surplus—a hearty 13% of domestic product. That "leaves the ringgit in a comfortable position" to defer a devaluation without spending too many reserves, says David Cohen, director of forecasting at Standard & Poor's International in Singapore. In fact, some foreign analysts, if the ringgit were allowed to float, it could rise more than 3.5.

There could be snags, though. To join the MSCI indices, Malaysia must show greater market liberalization. John Fildes, executive director of Citicorp Asia. Besides lifting remaining capital controls, the firm wants Mahathir to settle a dispute in which \$3.8 billion worth of Malaysian stocks trading on Singapore's Central Limit Order (CLOB) exchange were frozen. Investors holding these shares want to be able to sell them. But Malaysia still regards the CLOB as a rogue bourse.

Meanwhile, Malaysia's capital surpluses could shrink fast should imports rebound, putting the ringgit at new lows. And because Mahathir has been urging banks to pump fresh funds into companies run by his cronies, rather than enacting real reform, Malaysia's debt crisis could flare anew. But if it goes according to Mahathir's plan, he will be safely back in office by the time Malaysia must confront these problems.

By Michael Shari in Kuala Lumpur



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EUROPE

THE BANKERS' GRAND WALTZ

Consolidation may soon dissolve national boundaries

In Paris, Bank of France Governor Jean-Claude Trichet struggles to broker a deal between the top executives of Banque Nationale de Paris and Société Générale, locked in a takeover battle for five months. In Germany, Deutsche Bank and Dresdner Bank gingerly discuss combining their inefficient German retail operations—a precursor to a massive shakeout. Not to be outdone, on Aug. 19, P. Jan Kalff, chairman of Dutch banking giant ABN Amro Holding, declared that he is back on the acquisition trail, eyeing prominent targets in Italy and France, including Société Générale itself.

Indeed, hardly a day passes without a new sign of upheaval at Europe's top financial institutions. For months now, European banks have been in a race to consolidate their holdings—and build up the bulk needed to compete against global rivals in Europe's newly unified financial markets. Most of the attempted takeovers or mergers up to now have been domestic deals, such as BNP's bid to grab control of both Société Générale and Paribas, or small, regional linkups, such as that of Sweden's Nordbanken Group and Finland's Merita Pankki.

"MATTER OF TIME." Now, however, several European banks are preparing to break taboos by lunging after their rivals elsewhere in Europe. Deutsche Bank CEO Rolf E. Breuer and Emilio Botín, co-chairman of Spain's Banco Santander Central Hispano (BSCH) are among those leading the way (table). Says Matthew Greenburgh, co-head of Merrill Lynch & Co.'s financial-institutions group in London: "It's only a matter of time before there's a crossborder merger between two of the really

big banks. And if that happens, it will certainly transform the market."

The tumult points to the end of the line for many of Europe's national banks. In an era of the euro, globalization, and the Internet, banks need critical mass and geographical diversity to retain customers and satisfy demanding shareholders. The efforts by Trichet and BNP Chairman Michel Pébereau to build a French national banking cham-

expect Bouton to keep fighting by seeking support from other shareholders, backing from a new foreign partner. So far, the takeover battle has produced one victim: Paribas Chief Executive André Levy-Lang resigned Aug. 25. But even if Bouton loses, it's just a matter of time before forces of competition pry France's market open. "The French will sooner or later have to accept foreign acquisitions in the banking sector," predicts Ernst-Ludwig von Thadden, research fellow for London's Centre for Economic Policy Research.

HAMSTRUNG. The most aggressive predators so far have been banks outside Europe's biggest economies. That's because they don't have huge domestic markets. ABN Amro boasts \$490 billion in assets but accounts for less than 1%

of all deposits in the 12-nation euro zone. That's why the bank wants to acquire Italy's Banca Roma, in which it already holds an 8% stake, or Société Générale. It's also why Group Chairman Rijkman Groenendaal launched a friendly takeover for the 58.2% of ING does not own in Germany's BHF. Meanwhile, Spain's is maneuvering for a 40% stake in the Portuguese banking group controlled by first Antonio Champalimaud. And the word in London is that Lloyd's Group is negotiating a merger with Banco Vizcaya.

As the shakeup gathers pace, national governments will control the process. EU rules prohibit discrimination against foreigners on the basis

of nationality. And the European Commission—not national watchdogs—is responsible for improving cross-border mergers. So more bankers are likely to fight when governments try to block them. "There's a growing feeling that the barriers to crossborder banking can be overcome," says Angus Hislop, partner for European banking at PricewaterhouseCoopers in London. Floodgates could open any day.

By David Fairclimb in Frankfurt and Carol Matlack in Paris

EUROPE'S KEY PREDATOR BANKS



KALFF

ABN AMRO

With big operations in the U.S., Brazil, Hungary, and Thailand, the Dutch banking powerhouse is eager

to build market share in the euro zone. Its likely targets: Banca di Roma and Société Générale.



BOTIN

BANCO SANTANDER

Strongly placed in Latin America, the Spanish giant is bidding for 40% of Portuguese financial

services empire. Also eyeing Société Générale.

DEUTSCHE BANK

It's talking with Dresdner Bank about integrating retail banking networks.

With assets in Italy, Spain, and Greece, it is keen to buy in France.



BREUER

ING GROUP

The Dutch conglomerate already owns Barings in Britain and Belgium's Banque Bruxelles Lambert.

It's currently buying the 58.2% of Germany's BHF-Bank that it does not already own.



VAN DER LUGT

ambitious last-ditch attempt to preserve the clubby ways of French finance. Above all, Trichet has been determined to prevent a foreign bank from swallowing up key French institutions. BNP managed to secure 65% of Paribas but only 31.8% of the voting shares of Société Générale. Daniel Bouton, Société Générale's chairman, fiercely opposed the BNP takeover.

Although Trichet may be able to pull off a compromise between BNP's Pébereau and Bouton, many analysts

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ED BY PATRICK SMITH

INDIA'S CONSERVATIVES ARE REAPING THE SPOILS OF KASHMIR

politics, war can work wonders. Just four months ago, looked as if the Congress Party, which had ruled India most of its 50 years of independence, would sweep into power. But when Indians go to the polls on Sept. the third time in four years, the likely winner will be the Minister Atal Bihari Vajpayee and the governing Janata Party.

celebrating Vajpayee's comeback was India's recent victory over Pakistani-backed rebels in the Kashmir conflict. A re-

building economy and surging stock market have also helped. Polls indicate that the BJP and its numerous allies may win enough legislative seats to last out a full five-year term. The Congress, led by Sonia Gandhi, the wife of slain former Prime Minister Rajiv Gandhi, limps far behind.

It is more than a political upset in the making. At bottom, it marks a national change in consciousness. Congress long billed itself as the party of modernization—and successfully riding a wave of popular aspirations. Suddenly that looks like yesterday's stance. In Vajpayee's India, Sonia Gandhi's "progressive" rhetoric, focused on the plight of the downtrodden, is patrician and retrograde. The BJP, by contrast, is seen across as the party of economic growth and military might. It effectively is preaching a form of identity politics—that Indians can stand tall in the world just as they are. The BJP's reversal of fortunes has amazed most analysts.

Much of its 13 months in power, the Hindu nationalist BJP had a reputation for religious bigotry. The coalition it led was marked by incompetence, and Indians had grown disenchanted with the chaotic transition from socialism to capitalism. After a food crisis last September, the party lost local elections even in strongholds such as New Delhi.

But the conflict against Muslim separatists in Kashmir

tilted the scales. The rebels received the tacit support of the Pakistan military. Feuds with its neighbor have always been an emotional issue for Indians; even cricket matches between the two countries are highly charged affairs. The Kashmir issue gave Indians the common enemy they needed to renew their sense of national power.

Confidence in the economy, long a vulnerable point for the BJP, has also improved. Just last year, the BJP's protectionist tendencies left businessmen and foreign investors feeling rattled. Now, the government's aggressive promotion of the information technology industry has boosted software stocks and exports. So far in 1999, industrial production is up by 5.6%.

SONIA'S SLIDE. Indeed, the BJP's reform program is now virtually indistinguishable from the Congress Party's. Both vow to keep reducing government controls and open up more segments of the economy to private investment. Both also promise growth of 8%, compared with a forecast of 6.5% this year. The BJP's reforms are also rallying investors. The Bombay Sensex index is up 54% this year. "Politicians are finally realizing that it's all about the economy," says Surjit Bhalla, a director at New Delhi's Oxus Fund Management.

The ruling party also benefited from the collapse of Sonia Gandhi's campaign. Despite speaking fluent Hindi, Italian-born Gandhi couldn't shake her image as a foreigner, which doesn't sit well with India's nationalistic mood. Nor did she capitalize on widespread anxiety that the BJP's Hindi nationalism, which in 1992 led to the razing of a famous mosque, had gone too far. The hope is that with a strong showing at the polls, Vajpayee can control his party's most radical elements. Most Indians now seem to see him as the best hope for a modern India, rather than a retreat to the past.

By Manjeet Kripalani in Bombay



VAJPAYEE: Once and future premier?

GLOBAL WRAPUP

FINCH TAX CUTS?

Pressure is building across the political spectrum for tax cuts in France. Socialist Prime Minister Lionel Jospin wraps up his budget plan for 2000. Jospin has already proposed targeted tax cuts to spur housing construction. But Laurent Fabius, Socialist leader of the National Assembly, is urging him to go further, warning that French voters are tired of bearing one of the heaviest tax burdens in Europe. Economists also warn that France is at a growing competitive

disadvantage as Germany and other governments slash corporate taxes to stimulate business. France can afford tax cuts: Government revenues are running nearly 8% above last year as the economy strengthens.

THAILAND GETS TOUGH

► Thailand is moving to curb its black economy, estimated to be worth up to \$18 billion a year. Newly approved legislation targets everything from the sex trade and illicit narcotics to money laundering and tax evasion, backed by fines and jail sentences of

up to 10 years. Thailand has long had a reputation for corruption often associated with its police forces and politicians as well as with political vote buying. The crackdown is the result of pressures from inside and outside the country, especially from the Vienna-based Dublin Group. That group's donor countries, including the U.S., assist developing states faced with large illegal narcotics operations. "The new law doesn't change the culture of Thailand overnight," says one Western banker, "but it's a step in the right direction."



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Cover Story

Disheveled and exhausted, Chris Larsen stomps into Windows on the World, the ritzy restaurant on the 107th floor of Manhattan's World Trade Center. The chief executive of E-Loan Inc. is here for a dinner to toast the online mortgage company's biggest milestone yet: its initial public offering, scheduled for the next day, June 29. But Larsen is hopping mad, Chief Financial Officer Frank Siskowski is dead tired,

and co-founder and President Jan Pawlowski isn't even here.

Some party. Sheer exhaustion plays a part in all this gloom, since E-Loan execs have just finished airing two weeks of crisscrossing the country to pitch investors. But there is more at play here. Rival Intuit Inc. has just sued a claim that its Quicken mortgage.com site made more loans in the first quarter—a low blow on the eve of E-Loan's IPO. And Pawlowski?

INSIDE

AN

E-LOAN

Going public is a sure path to riches. Or is it? E-Loan's saga tells of perils at every



THE ROADSHOW MUST GO ON:
PAWLOWSKI AND LARSEN
REVIEW THEIR PRESENTATION

MADISON, WIS.: LARSEN AND TEAM HEAD FOR A MEETING WITH MONEY MANAGERS



INTERNET



A TOAST AT NASDAQ: WITH CFO SISKOWSKI (CENTER) THE DAY OF THE IPO

TO

BY ROBERT D. HOF

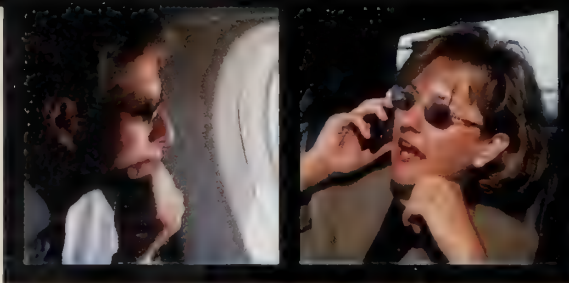
downright angry with Goldman Sachs & Co., E-Loan's underwriter and the dinner's host. Earlier in the day, Goldman quashed the trio's hopes for a high stock price, citing worries about wavering investors—leaving her with no appetite for the bankers' company.

Mostly, they're all vexed by one inescapable fact: E-Loan's fate is now utterly up in the air. A month earlier, nearly every Internet IPO rocketed to the sky. But after several weeks of seesawing Net stocks and with a summer swoon possibly approaching, the E-Loan IPO could just as likely flop. Goldman General Partner Lawton Fitt isn't offering much comfort. Once the IPO opens, she says, "it'll be the longest half-hour of your life. It's like being on a hang glider, running off the side of a cliff, and hoping the winds aren't blowing against you."

Going public: It's the ultimate rite of passage for a young company, marking the transformation from startup adolescence to corporate adulthood. For one thing, it raises a war chest—in E-Loan's case, more than \$50 million—and makes millionaires out of hard-working employees. Even more important, a

public company commands instant credibility, the ability to raise much more money from future offerings, and a lofty stock price that can be used for acquisitions. That's why, in the first six months of 1999 alone, 231 companies went public—nearly two every business day—raising \$26.7 billion, according to business researcher Hoover's Inc.

Yet for all the attention IPOs command, they remain shrouded in secrecy. The Securities & Exchange Commission bars companies from hyping stock with anything but a



"The idea of a competitor beating us to an IPO is very threatening"

CHRIS LARSEN
Chief Executive

"I always worry that I let people down"

JANINA PAWLOWSKI
President

prospectus, so the public is pretty well shut out of the process. Until now. By agreeing to hold publication until the "quiet period" ends, 25 days after the IPO, BUSINESS WEEK obtained rare access to E-Loan's offering process—from the painstaking preparations for investor presentations all the way to the launch on Goldman's trading floor.

The picture that emerges defies the popular image of IPOs as a sure and easy path to riches. As common as they are today, IPOs are amazingly fragile. It doesn't matter much whether a

company has a track record of increasing revenues and a bright future. IPOs are especially subject to the whims of investors—and lately, they've been in a bad mood. With Net bellwethers such as Amazon.com and eBay down more than 40% from their late-April highs, investors suddenly are no longer bidding up every Net IPO they can get their hands on. **SOME GO SPLAT.** A few companies continue to soar: Red Hat Software Inc.'s IPO tripled on Aug. 11, and Agile Software Inc.'s doubled on Aug. 20. But many are getting delayed, postponed, or priced lower than expected. And some that have dared to go for it have, well, gone splat. When it filed to go public on June 2, for instance, E-Loan rival Mortgage.com had planned to raise as much as \$112 million. Not only did its initial price of \$8 come in well below its expected price range—raising half the expected amount—but it even fell its first day, to 7%.

With its offering, E-Loan was dancing closer to the cliff's edge than any IPO to date. A few comments in May from Federal Reserve Chairman Alan Greenspan that plunged the market into turmoil nearly ended E-Loan's dream. But Larsen couldn't abide waiting, especially with

Over Story

**SET FOR A FUND MANAGERS' BRIEFING:
A RELENTLESS PACE—DAY AFTER DAY**



**IN A MINNEAPOLIS HOTEL:
FINE-TUNING SLIDES FOR YET
ANOTHER E-LOAN PITCH**

ls lurking in the wings. "Every month makes a difference," he said at the time. "The idea of a competitor beating us to an IPO is very threatening." Against the advice of bankers, E-Loan plowed ahead—and slipped in before window started to slam shut.

But what a hair-raising ride: After opening at \$21, which is 50% higher than the offering price, it closed at \$37 and hit \$63 a week later—valuing E-Loan at \$2.4 billion. Then, as the market soured in late May, so did E-Loan's stock, falling around \$21 and wiping out some \$5 billion in market value. It's no wonder Silicon Valley executives who IPO riches "funny money."

FOR GRABS. Yet IPOs are no laughing matter: They are an absolute must for survival in the hyperspeed Internet Age. They're a one-time chance to rise above the cyber bedlam and establish leadership in the short time that it's still up for grabs. These are nutty days, as start-ups thumb their noses at conventional business practices and spend way past their apparent means to stake out their turf. It's a cold fact that, without untainted IPO money and especially a sky-high stock price for fund acquisitions, the odds are against a newcomer ever making it big. Already, E-Loan's new stature is greasing its way. On Aug. 23, E-Loan used 2.9 million of its shares to buy CarFinance.com from Bank of America Corp., moving the upstart into the market for car loans. The stock rocketed 75%, to 40%, the following two days.

E-Loan's experience going public provides a peek into what any IPO prospect might expect in this volatile market. Its IPO is a tale of giddy highs and exhausted despair, of surprising insights both corporate and personal. It's the story of how two founders, nearly broke less than two years ago, persevered against the odds and especially against their own doubts. It's about how, just as they were about to start on the roadshow, the IPO nearly slipped out of their grasp. And how, even on the day of the IPO, their joy was tempered by the untimely death of a colleague the night before. Not the least, as the market plays havoc with E-Loan's stock, the IPO is a telling reminder of the vanishingly thin line between failure and success.

"Sometimes I feel like, why do I have the right to do this?"

—E-Loan CEO Chris Larsen

It's December, 1998, and Internet stocks are red-hot in advance of the first cyber Christmas. There's no better time to go public. And business is booming: Although high mar-

keting expenses have put E-Loan firmly in the red, its revenues will hit \$6.8 million in 1998, up 555% from 1997. It was only three years before that Larsen, a former Chevron Corp. auditor, and onetime mortgage broker Pawlowski ditched the conventional mortgage business they founded in 1992 to start E-Loan. They saw going online as a way to turn the mortgage business on its ear, saving home buyers 50% on fees by cutting the loan agent out of the picture. Already, they have managed to build a leading brand name

and loan volume against the likes of giant Microsoft Corp.'s HomeAdvisor and online sites of mortgage behemoths such as Countrywide Home Loans Inc. and Norwest Mortgage Inc.

Despite a \$25.4 million investment by Yahoo!, Japan's Softbank Holdings, and venture firm Sequoia Capital last September, they're going to need money soon. They've just hired CFO Siskowski, a 52-year-old veteran of two public companies, Visa International and software maker Indus Group Inc. But there are still no heads of marketing or operations. Some E-Loan board members and close advisers aren't certain that the company is ready for an IPO.

Larsen and Pawlowski harbor their own doubts—more about themselves than their company. Soft-spoken but intense, with a wicked sense of humor, Larsen is the son of a United Airlines Inc. mechanic—a union man who thought the system was rigged against the little guy. The only thing that kept the 38-year-old E-Loan founder going in the early days was anger that the system might prevent him, too, from succeeding. He wonders if he's worthy.

HANDS FULL. So does Pawlowski, the self-deprecating daughter of postwar immigrants who ran a credit union to help fellow Poles buy their first houses in America. She feels she's continuing a family tradition. But the 39-year-old former Xerox Corp. analyst, who moved to Silicon Valley with her husband in 1989, has had a tough several years: Starting up E-Loan contributed to the breakup of her marriage in 1995—and trashed her credit so badly that when she tries out a rival loan site, she is denied. Pawlowski has her hands full at home, too: She has a 9-year-old son to bring up, and her father has Alzheimer's disease.

Regardless, the IPO window is open, and the market waits for no one. On Jan. 13, E-Loan's board gives the O.K. to interview investment bankers, and they're off to the races. By early February, E-Loan finishes the "bakeoff," the competition among seven investment banks to underwrite the offering and earn 7% of the proceeds. This fat sum—more than \$3 million in E-Loan's case—makes

THE MONEY TRAIL

What E-Loan got from its IPO after others took their share ...

TOTAL AMOUNT RAISED	\$56.3 million
UNDERWRITERS	\$3.9 million
ATTORNEYS WILSON SONSINI	\$700,000
ACCOUNTANTS PRICEWATERHOUSECOOPERS	\$550,000
PROSPECTUS PRINTER BOWNE & CO.	\$500,000
LISTING, FILING, AND IPO REGISTRATION FEES	\$118,000
MISCELLANEOUS	\$132,000
WHAT E-LOAN TOOK HOME FOR SELLING 10% OF ITS EQUITY	\$50.3 million

... and what the stakes of the founders and chief investors were worth at the closing price on IPO day:

BENCHMARK CAPITAL	\$298 million
CEO CHRIS LARSEN	\$206 million
PRESIDENT JANINA PAWLOWSKI	\$204 million
TECHNOLOGY PARTNERS	\$173 million
SOFTBANK	\$122 million
YAHOO!	\$36 million

DATA: E-LOAN

Pawlowski wonder if investment banking is overdue for its own middleman massacre.

But E-Loan needs the help, especially coverage by the investment bank's analysts to spur investor interest. That's what tips the scales. IPO powerhouse Morgan Stanley Dean Witter loses, largely because it can't promise coverage by its star Net analyst, Mary Meeker. Goldman, whose knowledge of E-Loan and its industry shines, will lead the deal, with help from Donaldson, Lufkin & Jenrette Inc. and its online arm DLJ Direct, plus Hambrecht & Quist and E*Trade.

The timing is tight. E-Loan wants to go public before Memorial Day, when investors start vacationing and might lose interest. The

company immediately jumps into drafting the prospectus. It's five weeks of pure

boredom, painstakingly writing every word, number, and possible risk to investors. Just hammering out a one-line mission statement takes the execs, bankers, and lawyers four hours. "It's like 35 people trying to write a term paper," moans Larsen. It's crucial, however—not only is the prospectus the only document a company can use to attract investors, but it's the chief defense against lawsuits by investors if the stock ever tanks.

NO TURNING BACK. At 8 a.m. on Mar. 22, Siskowski arrives at the Palo Alto (Calif.) office of financial printer Bowne & Co. to wrap it all up. He won't leave until the final draft is done—32 hours later—except for one short break at 3 a.m. to chow down on some eggs at a nearby diner. Finally, at 4:50 p.m. on Mar. 23, Larsen and Pawlowski press the send button to zap the prospectus electronically to the SEC. E-Loan's private life has ended, and there's no turning back.

After the filing, strangers keep calling and E-mailing Larsen and Pawlowski. They claim to be old high school

buddies, even while spelling their names wrong. They're all angling to get on the "friends and family" list, people close to the company who get shares at the initial offering price. They even get a call from Barbra Streisand. Pawlowski is so thrilled—and impressed with Streisand's gumption to call people she has never met—that she puts her on the list.

With the world now watching, E-Loan must quickly beef up its operations so investors can find no holes. Indeed, Larsen uses the filing deadline to spur managers and partners to close at least five deals fast—including expansion into Japan and Europe and higher warehouse credit lines to fund consumer loans. Says Doug Galen, vice-president for business development: "Everything's happening at warp speed."

So is the market for IPOs. In January and February alone, 36 Net companies have filed to go public, up from two in the same period last year. On Mar. 30, Priceline.com slams a home run, soaring 331% on its first day. Despite the euphoria, lots of industry watchers worry that the market is overheated. Warns Yahoo! CEO Tim Koogle, an E-Loan director: "Too much capital is chasing too many companies." Nobody knows how long the longest bull market in U.S. history will run, but everybody knows it won't last forever. No time to lose.

"You're fighting just to have investors remember who the hell you are when they write the check two weeks later."

—Judith McGarry, roadshow coach

Throughout April, execs and bankers spend several days carefully crafting a roadshow slide presentation for Larsen, Pawlowski, and Siskowski. Once it's completed, they do practice runs in front of Judith H.



PEOPLE...
After the filing, strangers want in on the inside list. E-Loan even got a call from Barbra Streisand

IPO D-DAY: THE TOP BRASS AT NASDAQ'S TELEVISION STUDIO



AT GOLDMAN SACHS: A BIG SQUEEZE FOR PAWLWSKI'S NIECES



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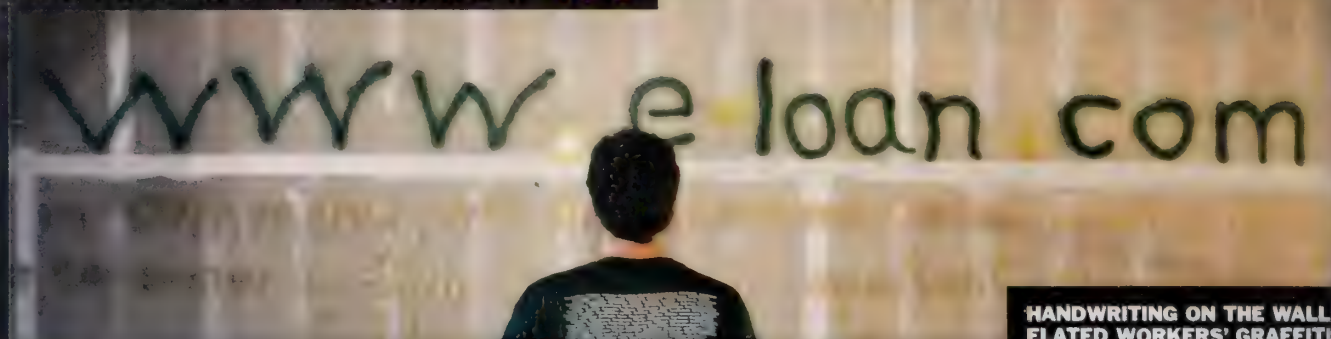


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HANDWRITING ON THE WALL
RELATED WORKERS' GRAFFITI

McGarry—a partner at Stone Communications, a San Francisco communications consulting firm. They need some work: While Siskowski seems to have the rhythm right, Larsen talks too fast, and Pawlowski sounds too tentative. They spend hours at a stretch for several days trying to polish the delivery to keep the attention of jaded investors, who see dozens of IPO presentations a week. Selling stock, it seems, is surprisingly like selling cars or deodorant.

Now, on a warm early May afternoon, it's time to hone their act in front of the underwriters. Even in the green fluorescent glare of a glass-walled E-Loan conference room called the Fish Bowl, the trio looks smooth. Then one

Goldman banker, playing investor, fires some tough questions at them. Lar-

sen tells the "investor" he's mistaken about a couple of facts, and McGarry objects: Don't contradict the guy with the fat checkbook, she warns. "But they're wrong!" Larsen protests, breaking into a sweat. "I'm not going to water down what's a revolution. If they don't like it, go and invest in Countrywide and don't f***in' invest in us."

"DELICATE BALANCE." There's a pause, some pursed lips, and downcast eyes. Then Pawlowski quips: "In all the years I've worked with Chris, he's only pissed off 40 people." After the meeting, McGarry winces. "I'm going to have to beat him up a bit," she says. "He's got to learn how to behave." But it's a delicate balance, she adds: "I would hate to throttle that passion. Investors just love that."

For the next two weeks, E-Loan is busy signing a European investment deal with Group Arnault, closing a

Japanese deal with Softbank, and answering the SEC's prospectus questions. They also prepare themselves for the roadshow. Pawlowski gets her bangs trimmed and buys a Christian Dior suit. Larsen works out in a health club to steel himself for the roadshow's dawn-till-past-dusk daily regimen.

But then, their smooth road to the IPO suddenly dissolves into gravel. Nearly two months into the

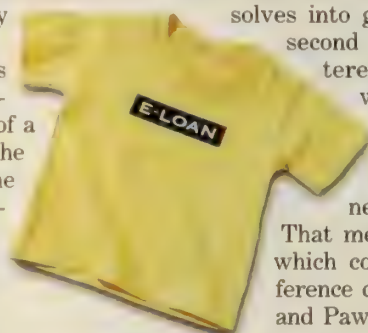
second quarter, it's apparent that rising interest rates have slowed refinancings, which had made up 96% of E-Loan's completed loans in the first quarter. Mortgages for new-home purchases are growing fast—great news—but they take longer to close.

That means they can't avoid a flat quarter, which could spook investors. During a conference call with Goldman on May 24, Larsen and Pawlowski reluctantly agree to delay the IPO pending a conference call with all the underwriters' analysts the following week.

Even before then, the market heads south. On May 26, two Net IPOs—free E-mail service Juno Online Services and Internet access provider Ziplink Inc.—"break," or fall below their offering price, on the first day. That's a disastrous enough sign, but the next day, the Dow Jones industrial average plummets 235 points. Everything seems to be falling apart.

Indeed, on June 3, Goldman comes back with gut-wrenching advice: Wait until the end of July to get the flat quarter behind the company. "That would mean eight weeks of waiting," moans Larsen. Afraid they might miss the IPO window, they huddle with their board, then get on the horn again with Goldman bankers—who pitch another option: drop E-Loan's filing

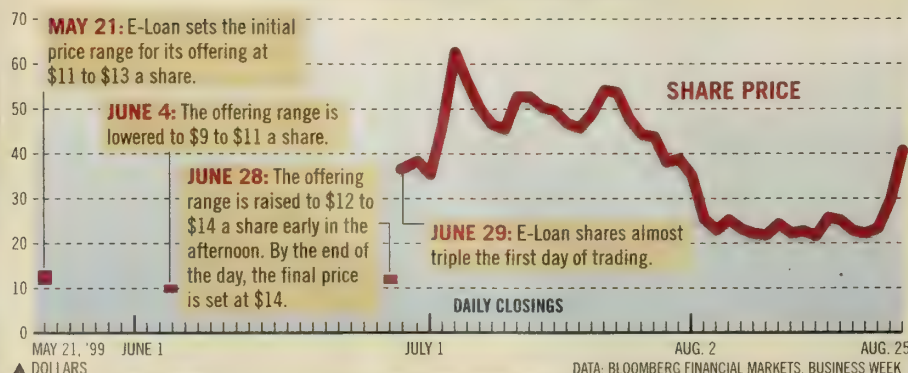
Cover Story



WRINKLES

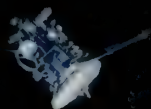
As a flat second quarter took shape, E-Loan had to delay its IPO

E-LOAN'S VOLATILE START



REHEARSAL TIME: AT E-LOAN'S HEADQUARTERS IN DUBLIN, CALIF.

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range by about \$2 a share, to between \$9 and \$11, which should keep investors interested. "Ew—do we want to do that?" asks Pawlowski. That would mean a drop of around \$7 million in what they raise—and might even look like they're desperate.

They finally agree, figuring they can raise the range again closer to the IPO. Besides, they need to move fast: E-Loan is down to \$4.1 million in cash, after losing \$11.4 million in the first quarter. It's not that they can't get more money. Softbank has offered to invest more in E-Loan. But there's no telling how much longer they might get delayed if they wait now—or when rivals might file to go public. They can't afford to wait.

"This is *way* worse than I thought it would be!"

—President Janina Pawlowski

Shortly after briefing the underwriters' sales forces in New York and San Francisco, the show gets rolling on June 15 at mutual-fund giant T. Rowe Price Associates Inc. in Baltimore. It's one of many large investors they'll pitch to in the next two weeks—usually one-on-one with a money manager, sometimes with 20 or more investors from different funds. A pattern establishes itself right away, Pawlowski writes in a diary entry posted to employees—all of them shareholders—on the company intranet:

"Drive, drive, drive. Park. Go to the bathroom. Present [to the investors]. Get feedback. Go to the bathroom. Drive, drive, drive... Park, run, run, run, sweat, run. No time for the bathroom!... Whew!... Do we have to do this again tomorrow?" It soon strikes her that they're living some twisted version of the movie *Groundhog Day*, in which Bill Murray relives one day over and over.

On the second day of investor meetings, starting in Milwaukee, they start to hit their stride—and get a little taste of what riches can bring. Outside a meeting, Larsen sees their stretch limousine and shakes his head: "Isn't this the height of capitalism?" They're driven right onto the tarmac at the Milwaukee airport to their

chartered jet. Onboard, Pawlowski hands Larsen a magazine called *Millionaire*. He flips through the publication, spies an article entitled *The Rich Man in His Castle* and throws it down, muttering: "You get really twisted reading this stuff."

GETTING PUNCHY. Talk turns to other money matters, such as the mystery of IPO pricing. They're both suspicious of the underwriters, who won't say much about the process. "There's some banker in New York who you've never met making the decision," says Larsen.

By a 3 p.m. meeting in Minneapolis, their fourth city of the day, they're getting punchy. When one investor nods off, Larsen almost bursts out laughing—and to avoid it must hand off his presentation two slides early to a surprised Siskowski. To avoid laughing herself, Pawlowski digs her fingernails painfully into her palms.

Still, Larsen suspects one money manager in New York didn't invest—the only one they visited not to do so—because Larsen's fake cough failed to disguise his giggles.

Finally, on the chartered jet to Kansas City that evening, Larsen and Pawlowski relax. Sipping a Red Hook beer, Larsen—like Pawlowski, an active Democrat—muses about how companies like his may eliminate so many jobs that governments will be forced to become more socialist. "Of course," he adds, "I won't be describing this scenario to investors."

The next week and a half is a blur of meetings, sometimes eight a day, sometimes starting at 7 a.m.—excruciating for Larsen and Pawlowski, who hate mornings. They zip from Denver to San Diego to Los Angeles to San Francisco to Chicago to Houston to New York to Boston, and finally back to New York—58 meetings and close to 200 money managers in all. They often subsist on Power Bars and water until dinner. But somehow, they get their message through. Emmy Sobieski, a fund manager at San Diego mutual fund group Nicholas Applegate, is impressed with E-Loan's passion to change its industry and its ability to roll with interest-rate hikes. "They reacted very, very nimbly," she says.

By the last day of the roadshow, Friday, June 25,

Cover Story



CAPPED OFF

Low on cash and afraid of missing its IPO window, E-Loan decides in June to go for it full-steam

IPO DAY AFTERNOON: PAWLOWSKI AT NASDAQ'S NEW YORK OFFICE



AT GOLDMAN: COUNTDOWN TO TRADING THE STOCK



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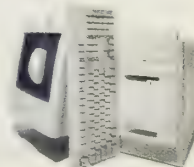
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they're a well-oiled machine. Ever cautious, however, Sean Macnew, one of two Goldman analysts to accompany E-Loan on parts of the roadshow, says they should not get too excited about the 70 people who show up for their noon presentation at the stuffy Metropolitan Club in New York: "A lot of people come for the free lunch." By now, Larsen wants to strangle him.

After their presentation, investors pepper them with almost two dozen questions: Why are 12% of customers dissatisfied? When will you break even? How do you avoid bias on loans that they fund themselves compared with those referred to other lenders? "He didn't answer your question," one money manager says to that last questioner. Some duck out early, while others seem to pay more attention to the chicken and the mesclun salad. An outsider might think E-Loan's IPO will die a humiliating death. But the trio, drawing on some sixth sense, seems happy. Or maybe they're just relieved that their "two-week death

march," as Siskowski calls it, is finally over.

"I have a bomb. I want \$16 a share, or I blow the place up."

—Chris Larsen

On Monday, after a weekend that feels to Larsen "like waiting for open-heart surgery," the trio has a morning conference call with Fitt to review investor demand. Her gut feeling based on knowledge of prospective investors—and it seems that's about as scientific as it gets—tells her they can raise the price range to between \$12 and \$14, which would show momentum.

Problem is, Larsen and Pawlowski had been hoping for \$16 a share, the price Softbank had offered to pay a month earlier when it looked like the IPO might not go.

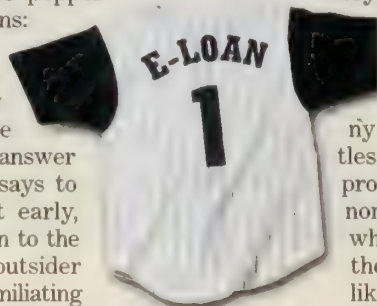
That would net E-Loan millions of dollars more—about \$3.5 million for each extra dollar in share price. Now, this looks unlikely. And since Larsen doesn't actually have the bomb he joked about with Pawlowski before the meeting, he has little leverage. "It was like a kick in the stomach," says Pawlowski. "I wanted to hear some encouraging words, and there was nothing." Adds Siskowski: "I feel like I've been to a proctologist—and he had a very cold finger."

It's a feeling many startups experience. Indeed, Proxicom Inc., which went public in April, dumped Goldman as lead banker after disagreeing on the company valuation. But most can't afford such battles. "It's easy to feel overwhelmed with the process," says Yahoo!'s Koogler. "In the end, none of us controls any of it." By day's close, when E-Loan's price is finally set at \$14, at the top of the range, it's clear that investors liked what they saw. Orders pile in for 109 million shares—26 times as many as will actually be sold. It's a strong show of support—so strong that E-Loan execs wonder anew why the heck they couldn't have upped the price to \$16. "All this work on the IPO, and we could have raised as much in one day" from investor Softbank, grouses Larsen.

"Now it's out of your hands. It's all up to investors."

—Goldman Sachs analyst Roy Navon

Larsen arrives before anyone else on the morning of June 29 at the 1 New York Plaza offices of Goldman Sachs, near Wall Street. He's red-eyed after a sleepless night—although he fared better than former USWeb CEO Joe Firmage, who believes he saw an alien one night just before his company went public. "I totally get that now," Larsen deadpans. "If it wasn't for the Prozac, I never would have gotten through it." Jokes aside, he wouldn't miss any of this for the world. In less than an



GAME OVER

"If it wasn't for the Prozac, I never would have gotten through it," jokes Larsen

Cover Story

ON THE HOT SEAT:
PAWLOWSKI AND LARSEN
GIVE A RADIO INTERVIEW



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OFFICE TOASTS THE
SOARING STOCK

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hour, the first shares will start trading and Larsen will know whether the work was worth it.

He's soon joined by Pawlowski, her 9-year-old son, Adrian, who's wearing an E-Loan polo shirt and a Lion King cap on backwards, and her two teenage nieces. Adrian offers everyone fluorescent-colored candy vines, but Larsen and Pawlowski decline—no room around the knots in their stomachs. "This is it, Chris!" Adrian shouts, and gives him a high-five. On the way down to Goldman's trading floor, Larsen feels for his lucky charms—a St. Christopher medal and a rubbing rock—and suddenly looks panic-stricken. He forgot them! "They're still in my bag," he mutters uncertainly, "so that counts."

Cover Story

On the huge trading floor, plastered against a wall, Larsen, Pawlowski, and Siskowski look powerless and vulnerable. All they're allowed to do is watch as hundreds of twentysomethings, mostly men in starched shirts and ties, stare at large PC screens, occasionally yelling, "88, Johnny!" or "737,000 Staples to buy, J.M.!" A large green ticker overhead silently spools out arcane stock symbols and prices.

Fitt and another Goldman managing director, Robert Shea, lean into a screen that stands 30 feet away, watching events intently. They're waiting for the end of a 15-minute no-trading window before the opening that Nasdaq requires to make sure there are no pricing anomalies—such as bids that are identical, providing no incentive for trades. Breathless with anticipation, Pawlowski squeaks: "C'mon, I

can't breathe!" Then Fitt and Goldman analyst Roy Navon hustle over to explain that the stock likely will open at 28, then fall by two or three points. "That's cool," says Larsen. "In this market, that would be very successful."

Back at the screen, Shea yells, "O.K., you got 20% open! Just before noon, when traders aren't quite so busy as earlier, EELN, E-Loan's symbol, comes snaking across the ticker. "Awesome," says Navon. "You're up 50%!" Grinning on his ear, Larsen hugs Pawlowski, who just sighs and hugs his nieces. Siskowski gives Larsen a soft, relieved high-five. It's no Priceline, perhaps, but it's "not too shabby," according to Siskowski. Larsen lingers, drinking it all in, burning it into his memory. "I'm never going to sleep again," he says.

"NO WAY!" Heading back upstairs, they call the troops back home in California, who have been watching the stock rise on a ticker set up in a vacant building next door. On the floor, someone has defiantly spray-painted "In Your Dream, Quicken!" and dead-body outlines labeled "iOwn.com" and "Mortgage.com." Emotions are mixed: E-Loan's Bob Farrar, a loan specialist in his 60s, died of a heart attack the night before—a big loss in a company with only 250 people. There are also tears of joy as champagne corks pop: The stock rises, and employees egg the ticker on: "30, 30, 30!"

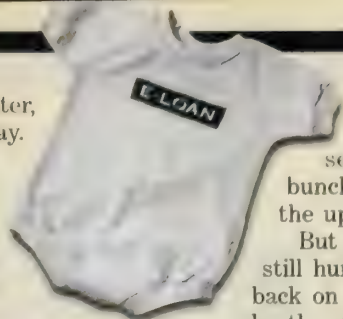
Over the squawk box, Larsen hears someone say the stock just hit \$38—only five minutes after it was at \$23. Impossible. After they hang up, he laughs: "They're watching the wrong stock." But he's wrong: In a flash, the stock has rocketed—now it's up another \$5, to \$43. "No way!" yells. "Omigod!" Finally, after all the struggle, it's pay

The tables are turned.

e. When the market closes a few hours later, E-Loan's stock will have risen 164% on the day. Your baby's worth a cool \$1.4 billion.

"Every five minutes I run the calculator. How can you not have that on your mind?"

—Tara Kelly, E-Loan production manager



The next day, back at E-Loan's headquarters in Menlo Park, Calif., 45 minutes northeast of San Jose, employees are still giddy during a brief afternoon homecoming for the road warriors. And why not? Some 41 employees, such as loan production manager Debbie Stith, a single mom, are suddenly millionaires on paper. And as E-Loan's stock keeps rising—hitting a closing high of \$63 on July 6—others can afford that new car, or set up a college fund. But there won't be much time to spend it, says fellow production manager Tara Kelly: "Now you have to work even harder."

FOR GAIN. Her warning is justified: While E-Loan's stock remains fairly steady for several weeks, it soon becomes clear that the IPO cuts both ways. By early August, E-Loan's stock sinks below \$22, far below the first day's price. The culprits: higher interest rates, a sagging overall market, and investors finally sated from the IPO feast. The stock remains well above its \$14 offering price, so employees and early investors can still boast a fat gain on their investment. And there is an upside: Rivals missed

SOME BABY
At the end of the first trading day, E-Loan's stock will have risen 164%, to a cool \$1.4 billion

the window. Before Mortgage.com's IPO dud, Larsen says, "we could easily have seen two or three competitors raise a bunch of money." Now, he says, E-Loan has the upper hand in deals.

But while stock declines are no surprise, they still hurt. Stith, who harbored hopes of cutting back on work to spend more time with her son shortly after her stock vests in two years, must put off such dreams a little further. Frets Pawlowski: "I always worry that I let people down." The bigger concern is how reliable its market value is for making more acquisitions. For all the money the IPO brought in, it's apparent that E-Loan's currency—like many new issues that offer relatively few shares to the public—is nearly as volatile as a South American country's.

The certainty of uncertain stock prices is why Larsen and Pawlowski aren't letting up. In just the first week after returning home, they signed two big deals: further expansion in Britain, Australia, and New Zealand, and an agreement to provide multimedia financial material through cable Internet access provider Road Runner. Says Larsen: "It's like you pass the finish line of the marathon and people say, 'Thanks a lot, but you still gotta run.'" So they take a deep breath, another step, and don't even think about stopping.

With Gabrielle Saveri

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FAST-BUCK TRADERS GET THE HEAVE-HO

Mutual funds turn up the heat on so-called market timers

Market timers vs. mutual-fund managers: The battle between the two sides may be somewhat arcane, but the stakes could be high for fund investors.

Professional timers, many of whom control millions of clients' dollars, dart in and out of funds, taking advantage of the cost-free entrance and exit features of no-load mutual funds. Depending on their trading system, the timers might keep their money in a fund for months, weeks, or—in an increasing number of cases—just a few days.

Fund managers complain that all that sloshing around can raise a fund's overhead and lower returns. Timers' moves can possibly raise the tax bill for the buy-and-hold investors if the funds are forced to sell stocks with capital gains to meet redemptions. In the past, most funds dealt with frequent switchers with warnings to stop or leave.

Now, fund managers are getting serious. They're slapping on redemption fees, with the hope that the timers will curb the short-term trading. On Aug. 16, Oakmark posted 2% redemption fees for shares sold in less than 90 days. The charge applies to all but the Oakmark Fund and the Oakmark Equity & Income Fund.

WARNING. The fees were not Oakmark's first choice. William C. Nygren, portfolio manager of Oakmark Select Fund says the company has been policing suspected timers for a while, sending warning letters to accounts that made short-term trades of \$1 million or more. The million-dollar trades eased up, says Nygren, but then there was a jump in the number of short-term trades in the high six figures.

Nygren says the firm's international funds were particularly frequented by timers who bought international funds when Wall Street rallied, betting on a follow-through rally the next day. Indeed, Invesco Funds recently slapped a 1% exit fee on four international and one high-yield bond fund that applies to redemptions made within 90 days.

Some companies are trying to timer-proof their funds before the hot money finds them. Firsthand Funds has two new technology funds in registration that will have 2% redemption fees on shares held less than six months. Earlier this

all its funds and predicts most fund groups will adopt them.

To the timers, these latest bars to the exit doors are too much. "The fund wants to accept timer money but then able to lock the door when the money wants to leave," says David Lucca, timer with Rhoads Grunden Lucca Capital Management in Lancaster, Pa., a president of the Society of Asset Allocators & Fund Timers Inc. (SAAFTI). "They can't have it both ways."

Lucca suggests that the fund companies are going through a tough time and they're trying to make "timers in scapegoats." Timers are easy targets. Academics argue that timing does not work, and most timers have underperformed the bull market.

So have the



year, Firsthand Technology Innovators Fund, then \$60 million in assets, was hit with a \$10 million redemption—"and we had to sell positions we otherwise would not have," says Steven C. Witt, a Firsthand managing director. Witt says Firsthand hopes to extend those fees to

funds. Nearly 96% of the diversified U.S. equity funds underperformed the Standard Poor's 500-stock index over the past five years. That's why some investors are choosing low-cost index funds instead of the high-fee, actively managed portfolios. Or they opt out of funds entirely, going to separately managed accounts or

up, do-it-yourself online investing. As a result, cash inflows are declining. Flows to equity funds peaked at \$227 billion in 1997; so far this year, the annualized rate is about \$180 billion.

What could explain why fund companies are getting edgy about the timers. About a stream of new money, big redemption orders could force them to liquidate shares often at inopportune times, as selling into a falling market. But others say an outflow of assets could be detrimental to the fund companies, which are worried about their own revenues. "They're raising fees to hold on to assets," says Douglas Fabian of *Premium Investment Resource*, a switch-fund newsletter.

"And they are doing it under the guise of helping in-

transaction-fee fund programs at Charles Schwab & Co. and Fidelity Brokerage Services, which keep their redemption fees to offset their costs. "We needed to create some speed bumps," says Jeffrey M. Lyons, Schwab's senior vice-president for mutual-fund marketing. "We were looking out for the interest of the funds, but we also wanted to curb excessive trading because that's a cost to us."

UNFRIENDLY. Earlier this year, Schwab lengthened the amount of time investors had to hold a fund in the OneSource program before the sale would trigger a redemption fee; retail accounts must now hold 180 days, and institutional accounts, 90 days. And Fidelity went from five free switches per year with no minimum holding period to levying fees for those who sell within 180 days.

While funds and timers often have had conflicting interests, they usually

elsewhere. At the time, Value Trust was more than \$8 billion and Special Investment more than \$1 billion. "They were huge funds," he says. "How was I going to adversely affect them?"

Load funds attract fewer timers than no-loads, but load-fund managements are no more tolerant of them. AIM Funds, a \$115 billion group, last year booted timers with a collective \$600 million. And starting Sept. 15, AIM shareholders will be limited to 10 switches per calendar year—and management says frequent traders may be cut off sooner. Timer Bob Pritchard, who works out of Wedbush Morgan Securities Inc. in Eugene, Ore., says he was surprised in June when MFS Emerging Growth Fund refused to take what would have been his 13th trade of the year. He persuaded them to take his sell orders but has not done any further trading with

FIGHTING FREQUENT SWITCHERS

To discourage short-term trading in their mutual funds, more and more fund management companies are instituting redemption fees.

OAKMARK Charges a 2% redemption fee on shares sold within 90 days of purchase. Applies to all funds except Oakmark and Oakmark Equity & Income Funds.

INVESCO Levies redemption fees on four international and one high-yield funds. The rate is 1% for shares sold in less than 90 days.

BRIDGEWAY Small fund group reserves the right to levy a 2% redemption charge on its index funds if the Standard & Poor's 500 is down more than 5% in five days.

AIM Starting Sept. 15, investors are limited to 10 switches per calendar year.

FIRSTHAND Two new funds will have 2% exit fees on shares sold within 180 days.

CHARLES SCHWAB Doubled from 90 to 180 days the time that retail customers in OneSource funds must hold an investment or pay a redemption fee. Institutional customers' holding period was extended from 60 to 90 days.

FIDELITY BROKERAGE Shareholders who sell a no-transaction-fee fund within 180 days now pay a redemption fee. Previously, shareholders could make five trades a year without penalty or minimum holding period.

DATA: BUSINESS WEEK



vestors." James O. Rohrbach, president of Investment Models Inc. argues that exit fees can work against investors' interests: "A 2% fee may make some people who would be better off selling the fund."

Fund companies insist they are looking out for long-term shareholders. And in most cases, redemption fees go back to the funds to help offset higher commissions and market-impact costs resulting from increased trading. Two notable exceptions are charges levied by the no-

have found ways to work them out. SAAFTI's Lucca says the association's Fair Practices Policy tries to minimize timers' impact on the funds. The practices include clearing timer investments with the fund beforehand, limiting to 5% the amount of a fund's assets that one timer controls and, if possible, giving funds advance notice of withdrawals.

But that isn't enough for some fund groups. "More and more funds are becoming timer-unfriendly," complains Bruce Freimuth, president of Financial Timing Services Inc. in St. Louis. Last winter, he says, Legg Mason Funds asked him to take his \$7.5 million, split between the Legg Mason Value Trust and Legg Mason Special Investment Trust, and go

MFS Fund. Pritchard, who switches on average once a week, also stopped using Van Kampen Enterprise Fund because it plans to limit shareholders to eight exchanges per year.

It's not as if timers have nowhere to go. In fact, several mutual-fund groups—Rydex, ProFunds, and Potomac—explicitly court timers. Freimuth puts new clients in timer-friendly funds, but he still has more than \$70 million of his \$119 million in two no-load fund families, which he declines to identify. "They're grandfathered in," Freimuth says. But he's concerned that if current trends hold up, those fund groups, too, might show him the door.

By Jeffrey M. Laderman in New York

JUNK BONDS

THE DEFAULT DILEMMA

More companies are walking away from their debt

On Aug. 3, Iridium World Communications Ltd., a satellite mobile-phone company that raised more than a billion dollars of high-yield paper over the past two years, defaulted on its debt. But the event was far from isolated. Among the other high-profile companies that have recently turned their backs on debt obligations are funeral-service operator Loewen, restaurant chain Planet Hollywood, and discount clothing retailer Loehmann's.

In the first seven months of 1999, 107 companies defaulted on their debt, to the tune of \$28 billion. That compares with 75 defaults in the same period in 1998, worth \$11 billion, according to Moody's Investors Service. Today's 5% default level doesn't reach 1991's 10%, the height of the Michael Milken era. But the level now is near 1989's 6% default rate, which signaled the beginning of the junk-bond debacle.

How can defaults be rising against the backdrop of a strong economy, the longest bull market in history, and a hot initial public offering market? "The increase in defaults in the high-yield market is one of the most controversial issues in the market right now," in terms of why it is happening and how long it will last, says Kingman Penniman, director of research at KDP Investment Advisors Inc., a high-yield debt research firm based in Montpelier, Vt.

SMOKING GUN. "What we're seeing, in part, is a hangover from having been too generous with the supply of credit," says John Lonski, chief economist for Moody's. In the three years ended in 1998, there was a 66% increase in junk-bond issuance from the previous three years. "If more people are smoking heavily, there will be more lung cancer," says Lonski.

Nicholas D. Riccio and Leo Brand, authors of a Standard & Poor's Corp. study, say that in the third quarter of last year, "47% [of the defaults] can be traced to the Asian and Russian crises," says Brand. With a worldwide bottoming of commodity prices, any



company whose revenues are dependent on those products is vulnerable. This is the case with steel and energy companies.

Further, many companies skip the latter-stage venture-capital financing and without strong operating history behind them are "extremely vulnerable companies that would default at the first sign of trouble," says Brand.

Loose bank lending is also a factor. In the past few years, banks have been co-dependent partners to many companies using junk debt. Many financial institutions have been more than willing to renegotiate debt covenants, allowing businesses as long as the debtors feel they can get the cash elsewhere, typically equity from an initial public offering. But as the IPO market has come deluged with dot.com offerings, many non-Internet companies no longer have that backdoor method of paying down debt.

FINANCING DREAMS. "For a long time, high-yield financing was used to finance terrific companies with great cash flow," says Neil Subin, president of Trend Capital Management, a money-management firm based in Boca Raton, Fla. "But in the past few years, substantial amounts of money have been raised to support what amounts to dreams of companies with no revenue, no cash flow, but terrific projections."

It seems investors are beginning to get nervous. There have been redemptions from junk-bond mutual funds during the past four weeks totaling more than \$1.5 billion, according to AMG Data Services, a mutual fund tracking company. This outflow represents the fourth consecutive week of redemptions.

This follows a year-long trend in which companies are finding it more difficult to access the high-yield market. Already, issuance is down 25% so far this year, compared with new debt issued last year. And investors are demanding higher yields to compensate for their risk. For instance, from 1995 to 1997, the average junk-bond yield was 3¼% above comparable Treasury bonds vs. 4¼% today. Some investors worry that even those yields still don't reflect the level of risk in high-yield bonds today. "Eventually, there will be a flight to quality," says Brand, pushing up spreads even higher.

One thing seems clear: Rising stock prices and rising defaults can remain in tandem only for a relatively short time. Something has to give.

By Debra Sparks in New York

Recent Defaults of Junk Debt

NAME	INDUSTRY	DEBT AMOUNT MILLIONS	DATE OF DEFAULT
IRIDIUM	Telecom	\$1,450	8/13/99
KCS ENERGY	Energy	275	7/13/99
LOEHMANN'S	Retail	135	5/18/99
LOEWEN GROUP	Funeral services	276	6/1/99
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NOWHERE TO GO BUT UP?

The interest-rate increase could mean higher stock prices

Just as Hurricane Bret threatened to be one of the fiercest ever, it quickly dissipated into a tropical storm, giving way to sunny skies over choppy seas. The market may have taken a similar turn.

Over the past weeks, investors have been dazed and confused about a market depressed by rising interest rates. But as it became almost certain that the Federal Reserve would raise rates, the

cording to strategists, bodes well for the stock market for the remainder of the year. "It's clear that the correction over the past few weeks is over. And now that the rate increase is out of the way, the market should continue to advance," says Goldman.

One clue the correction may be over: The number of New York Stock Exchange issues hitting new lows peaked some two weeks ago, with new lows

rent: Y2K technical problems or concerns are likely to cause an economic slowdown toward the year's end.

Earnings are a major factor. Third and fourth-quarter results at U.S. companies look strong. Profits in both quarters are projected to be 21.4% higher than last year's comparable periods, according to First Call Corp.

Finally, investors have become much less bullish recently. And, as investors become more bearish, analysts become more bullish. According to a mid-August PaineWebber/Gallup poll, investor optimism regarding the economy dropped to its lowest levels in more than two years. And investor optimism regarding the stock market declined sharply in August, down from an all-time high in July.

But though the Dow has staged a comeback, the average S&P-500 index stock is still 18% off its 52-week high.



FEDERAL RESERVE: Its rate hike brought relief to the market

Dow Jones industrial average ended up at its second-highest level ever on Aug. 24. The Standard & Poor's 500-stock index and the Nasdaq Composite Index both beat their previous day's high. On Aug. 24, in what seemed almost an anticlimax, the Federal Reserve came through with quarter-point increase. Yet the market hung in, even though the higher Fed funds rate was coupled with an unexpected quarter-point increase in the discount rate. "The only thing the market hates is uncertainty. It can deal with anything once it's on the table," says Alfred Goldman, chief market strategist at A.G. Edwards & Sons Inc.

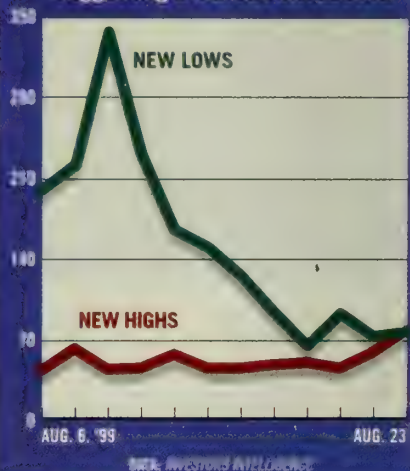
In fact, the interest-rate hike, ac-

countering new highs almost 5 to 1 (chart). Since then, new highs have gone up slightly. "This shows the sell-off is over," says John E. Gray, editor at *Investors Intelligence* newsletter.

Y2K AHEAD. But just how long can the market continue to go up? Many strategists say that it will drift upward at least through yearend. One reason is that it's doubtful the Fed will raise rates again this year. "The evidence of inflationary pressure just isn't there," says John H. Shaughnessy, chief strategist at Advest Inc. Also, with the global economy, especially Asia and Latin America, finally starting to improve, Shaughnessy says a rate increase could cause those economies to reverse. "Greenspan doesn't want to step on their financial toes," he says. Yet another rate-increase deter-

NEW LOWS SHRINK

New stock lows peaked in early August suggesting a market turnaround



the average Nasdaq stock is down 33%. That's why many growth-stock enthusiasts have gotten pickier, forsaking highly valued big stocks for companies with solid fundamentals and strong earnings momentum. "To earn money from here, you better own a company that can grow earnings," says A.G. Edwards' Goldman. Some companies he likes: Pfizer, Warner-Lambert, Intel, Dell, Wal-Mart Store and Fannie Mae. Others, such as Advest Shaughnessy, are more focused on strong growth companies that will benefit from global improvement such as IBM, General Electric, Apple, and, once again, Intel.

Going forward, investors' best bet may be to be "cautious bulls." However the market, like hurricane season, may still bring surprises.

By Marcia Vickers in New York

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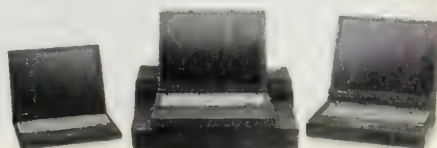


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SEARCHING FOR TURNAROUND BARBIE

But Mattel shareholders are wary of CEO Barad's promises

Jill E. Barad is known as one of the great performers on Wall Street. Rare is the presentation before analysts and investors where the chief executive of Mattel Inc. doesn't dance or sway on stage, usually dressed in a colorful Chanel or Escada suit, as she shows off Mattel's latest Barbie or Winnie-the-Pooh commercial.

But when a more subdued Barad appeared before investors and analysts at the Phoenician resort in Scottsdale, Ariz., on Aug. 6 to unveil Mattel's new toys, she failed to work her usual magic. She gave a seven-minute overview and left hours of rousing speeches promising strong performance to the heads of her brands, which include Barbie, Hot Wheels, Matchbox, and Fisher-Price. But instead of the usual bump up after a Barad presentation, the stock actually fell a point over the next two days. "People left shaking their heads, saying these numbers don't link with reality," says one analyst in attendance.

STREET SKEPTICS. The problem: After overpromising and underperforming spectacularly last year, Barad, 48, is under the gun to prove she can deliver the goods this holiday season. But she still faces a deeply skeptical audience on Wall Street. After a multibillion-dollar acquisition spree and an overhaul of top management, investors still aren't buying

Barad's projections that she can increase sales by 5% to 7% this year and generate 15% annual earnings gains in '99 and beyond.

There are plenty of reasons for skepticism. Last December, just a month after Barad enthusiastically reassured investors that Mattel would meet its projections, she shocked them with the news that revenue would fall \$500 million short.

For the

year, operating income tumbled 27% to \$364 million, on slightly lower sales of \$4.8 billion. Sales were flat through the first half of '99, and analysts question whether Barad can find the 8% to 10% growth she's counting on in the second half. That has helped slash the stock price by 45% over the past 12 months.

So far, Barad—who declined to be interviewed—seems to have kept the support of her board. "There has been no zero talk of Jill leaving," says William Rollnick, a board member for 16 years who describes Barad as "the best marketing person I've ever met in my life." But some investors say that could change if Mattel fails to meet expectations again. "This Christmas is the seminal moment. If she had another shortfall, the board would have to take action," says Erik P. Gustafson, a portfolio manager at Stein Roe & Farnham Inc., which bought 4 million shares this year, betting on a turnaround.

Barad has a lot to prove before she wins back investors' confidence. Many outsiders laud her strategy to broaden Mattel beyond toys. But it could take more than a year before investors know if there will be big rewards from deals such as its \$3.5 billion purchase of this spring of educational software giant Learning Co., and its development of the Mattel.com Internet site. In the meantime, Barad must squeeze more growth out of her core brands.

The biggest challenge Mattel faces is measuring up to its recent glory. Fueled by that phenomenal success,

Barbie, revenue rose more than tripled in the past five years, while operating earnings climbed an average annual 25%.

But to get those numbers in recent years, Mattel overstocked the retail pipeline. Meanwhile, retailers have been cutting the number of toys they order and shoving the risk of carrying inventory back to manufacturers.

Barad ran into trouble last year because she refused to scale back Mattel's revved-up goals. In early 1998, Toys 'R Us Inc., now the second biggest toy retailer behind Wal-Mart Stores Inc., announced it was slashing its total annual inventory by



HAPPY FACE

So far, Barad seems to have the support of her board. But some investors say that could change if Mattel again fails to meet expectations

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The Corporation

\$500 million. Barad still assumed other retailers would reload as usual after Thanksgiving. When they didn't, Mattel was stuck with high overhead costs.

Barad vows that won't happen again. Mattel claims it is shipping in line with what retailers are selling. It has slashed costs through a restructuring and a 13%, 4,000-person layoff. Barad cut out a layer of management, pushing out chief operating officer Bruce L. Stein, a toy marketing whiz she had lured from Sony Corp. 2½ years earlier. Mattel's brands are now consolidated under four newly promoted division presidents who report directly to Barad and have autonomy over everything from production to sales. Meanwhile, Ned Mansour, Mattel's longtime chief of administration and legal affairs, was made president. "This is a different company than we were two years ago," he says.

The new structure is designed to speed decision-

making and allow Barad to focus more on her strength—product strategy and marketing. That should address a key weakness: In the last two years, some products were not ready to ship until the fourth quarter. Some investors wonder, though, whether

the shakeup and Mansour's promotion will be enough to tem-

per Mattel's go-go culture and Barad's excessive optimism. "I don't see financial discipline emerging from Jill," says Joseph G. Kinnison, an analyst at American Express Financial Advisers, who sold its Mattel stock in the fall of '99.

Indeed, it's not clear where Barad will get the growth she's promising. It has to start with the 40-year-old Barbie franchise. The doll still accounts for 10% of Mattel's revenues and an estimated



NEW GIRLS IN TOWN

BARBIE

The new Generation Girl Barbie line is hipper, built around urban story lines, and July sales showed a bump upward. But Barbie is getting long in the tooth—girls are outgrowing her at an earlier age, and sales of the 40-year-old doll were down 14% last year.

DIRECT SELLING

Mattel expects to move \$550 million worth of American Girl dolls and other toys this year through catalogs and the Internet. And a consolidated Mattel.com Web site will sell toys at higher profit margins. But startup costs will cause the Web effort to lose \$70 million in 1999.

INTERACTIVE MEDIA

The Learning Co. gives Mattel a commanding position in educational software. Add that to the Barbie digital cameras and software Mattel already sold. But some analysts wonder if Mattel can gain enough synergies to justify the \$3.5 billion price tag.

Fixing up the Dollhouse

After last year's disappointing results, Barad is banking on growth in three key areas to turn things around

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of profits. But Barbie sales fell 14% year and were flat through June of year. Mattel is counting on a 10% ase in Barbie sales in the second But girls are bailing out at younger so Barbie is undergoing a hipness haul. Mattel recently launched a of Barbie friends called Generation The six trendily outfitted charac- come with talents ranging from eboarding to poetry writing. Early are encouraging: In July, retail- reported that Generation Girls ed drive a 17% increase in Barbie l sales.

Barad has also made considerable es in diversifying. Her 1997 pur- of Tyco Toys Inc. added the me Street and Matchbox brands, iding dominance in the infant, school, and boys' wheels aisles. And n Mattel bought Pleasant Co. for million last summer, it added the ular American Girl line of histori- based dolls and books for older t, ages 7 to 12. Analysts expect erican Girl to increase its \$300 mil- sales by 10% a year. More impor-, the deal helps Mattel reduce its endence on a few mass retailers. sant Co. sells through catalogs and

the Internet, and brings along the ware- houses and packaging to handle up to \$1 billion in direct orders.

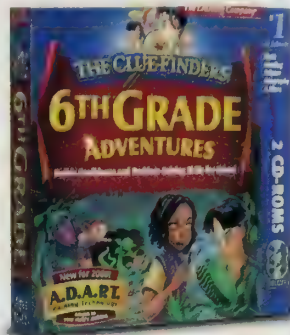
Mattel hopes to build a \$1 billion di- rect-to-customer business within a few years, double what it will do this year, though some of that could certainly come out of its tradition- al retail sales. Pleasant Co. is developing cata- logs for Mattel's major brands. Mattel is folding 80 separate toy and soft- ware Web sites into Mat- tel.com, which it hopes to spin off as a separate company. Still, the Web venture is expected to lose \$70 million in '99.

WIGGLE ROOM. Even pricier is Barad's push into the interactive world through Learning Co. Mattel instantly acquired \$1 billion in software sales, to add to its Barbie digital cameras and PC software. And unlike toys, software is selling fast—Learning Co. and Mattel's other software posted 20% growth in the first half of '99. Mattel plans to add more distribution and advertising muscle to the games, which include *Reader*

Rabbit, *Carmen Sandiego*, and *Myet*. But Mattel paid a steep 3.5 times sale for the company, so Learning Co. has to maintain a double-digit growth pace to justify the deal. And some analysts question whether that can be sustained, citing the age of some of the software outfit's brands and the diffi- culty of sorting out its growth following a spate of acquisitions.

The good news is that after a year of slow ship- ments from Mattel, store shelves have been cleared of excess Barbies and other toys. And through a re- structuring charge taken this summer, Mattel proba- bly bought enough wiggle room to meet its earnings target. "We feel completely comfortable," Mansour says. But in- vestors are inclined to wait and see what turns up under the Christmas tree. Come December, if they're not staring at a big turnaround, it may not matter what kind of song and dance Barad has planned.

*By Kathleen Morris
in Scottsdale, Ariz.*



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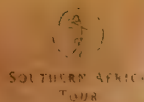
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THE INTERNET

WHAT'S IN A NAME.COM? PLENTY

A brawl over Net names could threaten Web self-government

It seemed like an inspired idea at the time. Recognizing that the Internet moves too quickly to be regulated by government, the White House last year decided to let Web users try to govern themselves. In June, 1998, it proposed creating a series of nonprofit corporations, run by Netizens, to manage vexing issues such as privacy, fraud prevention, and intellectual property protection.

The first matter handled under this groundbreaking plan seemed simple: the regulation of Internet domain names, those "dot.com" addresses that direct people to their favorite Web sites. Enter the Internet Corp. for Assigned Names & Numbers. Chaired by author and businesswoman Esther Dyson, a sainted fig-

ure in the tech world, ICANN was supposed to blaze a trail for self-regulation of the Internet.

But after less than a year, the White House's bold experiment in Internet governance is in jeopardy. ICANN is going broke and faces accusations of mismanagement by everybody from Ralph Nader to House Commerce Committee Chairman Thomas J. Bliley, Jr. (R-Va.), who sponsored a hearing entitled "Is ICANN Out of Control?" on July 22. Above all, ICANN is at war with Network Solutions Inc. (NSI), the highflying Herndon (Va.) company that has a government contract to sell Internet names in the .com, .org, and .edu domains. This battle will determine who controls the Web's address system—and, many fear,

could even temporarily destabilize the Net.

Indeed, this is the Internet's constitutional moment: the point in time when the political landscape is an open frontier and people gather to draft their Magna Carta of Bills of Rights. If Dyson's group fails, it could doom the White House's laissez-faire vision of the Net. Instead, we likely to see more traditional government regulation, which many tech executives fear will create a patchwork of contradictory local laws. If, however, ICANN succeeds, many believe it could evolve into the preeminent regulatory body on the Internet, with power extending far beyond the arena of domain names. Here's a primer on the key issues.

Why is ICANN under attack?

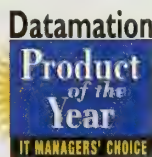
There are two main criticisms of ICANN: that it's operating in secret and that it's trying to grab too much power. Because of the importance of ICANN's mission, critics believe that its decision-making process should be as transparent as possible and they're angry that its board has held several closed-door meetings. This mistrust has only grown in the wake of a series of recent decisions in which ICANN has, in the eyes of Representative Bliley and others, acted outside its authority. In March, for example, ICANN authorized

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a \$1 fee on domain names to pay for its operating expenses—which Bliley quickly lambasted as an unauthorized tax.

ICANN is trying to mollify its critics. It has repeatedly declared that it has no interest in regulating anything other than domain names. And it has decided to open up its Aug. 26 board meeting in Santiago, Chile, to the public. In July, it also rescinded the \$1 domain name fee.

These steps have cut down the level of criticism but leave ICANN with a serious budgetary crisis. When former White House Internet guru Ira Magaziner dreamed up ICANN, he decided that the U.S. government should not pay for the group. But he didn't devise any alternative funding method. That's still a problem—not only for ICANN, but for the White House's entire vision of Internet governance. As a result, ICANN is now more than \$800,000 in the red and hitting up big telecom and computer companies for donations. In late August, MCI WorldCom Inc. and Cisco Systems Inc. lent it \$650,000.

That's not a long-term solution. While the money will ease ICANN's short-term cash crunch, it could cause Dyson's group to be perceived as being in the pocket of big business and hostile to consumer concerns.

Why is ICANN at war with NSI?

The battle between ICANN and NSI was probably inevitable. In 1992, the Commerce Dept. awarded NSI a contract making it the sole registrar of Internet names ending in .com, .edu, and .net, among others. The business is a gold mine. One of the few profitable pure Internet plays on the market, NSI had sales of \$94 million last year and boasts a market cap of nearly \$2 billion.

Among ICANN's most important duties is to devise a plan for breaking up this monopoly by the time NSI's government contract expires on Sept. 30, 2000, and to cut down the \$35 annual fee for domain names. Unsurprisingly, the two sides are at odds on the details of how competition should be created. ICANN wants NSI to sign a contract giving it the unilateral right to terminate NSI's license to register domain names—a provision the company refuses to accept. Adding to the tension, NSI claims it owns the master list of existing domain names and plans to sell it as a Yellow Pages-style directory called the *Dot-com Directory*. Both ICANN and the government argue that the list is public property.

What will happen if the two sides can't reach an agreement?

ICANN has given NSI a deadline of Sept. 10 to sign a so-called "accreditation agreement" to act as an Internet registrar. If no deal is inked by then, things are going to get dicey. While it's being careful to avoid making threats, ICANN clearly believes that NSI will have no right to remain in busi-



Esther Dyson has her hands full fixing ICANN's cash crunch. Funding is one of the issues that may sink the White House's vision for Internet governance

ness. NSI contends its original 1992 contract with the government gives it the legal authority to continue to operate Internet domains without ICANN's blessing. Legal experts say both sides' positions have some legitimacy. With so much money at stake, this fight could very well wind up in court.

Could the Internet be destabilized by a battle between ICANN and NSI?

If the two sides declare an all-out war, it's possible the day-to-day functioning of the Net could be slightly impaired. NSI manages the definitive registry of domain names. If ICANN or the government shut down NSI on a Monday, on Tuesday there would be no central list of domain names. While other companies own less complete lists, problems could crop up. For example, people who wanted to register new Net addresses would not have a place to go if they wanted to ensure that their domain names would be universally recognized.

No one wants this scenario to out. The Commerce Dept. is putting heat on both sides to wrap up an agreement as soon as possible. Meanwhile, the Justice Dept. and the European Union are investigating whether NSI is violating antitrust laws—which could also put pressure on the company to soften its position. Although there's a lot of talk these days about how the ICANN

war could destabilize the Internet, University of Pennsylvania telecommunications Professor David Farber predicts "the governments would step in to prevent that from ever happening. They would say, 'You can't handle this yourself, we will.'"

Could ICANN go out of business?

Just as the domain-name war threatens NSI's existence, they could doom ICANN. When the White House created the group, it assumed that a nonprofit without governmental police power would be able to manage Net policy issues effectively. If this turns out not to be the case, the ICANN will probably be shuttered.

At that point, the U.S. and other governments would have

three options, according to Jonathan Zittrain, executive director of Harvard University's Berkman Center for Internet & Society. They could hold on to the White House's vision of Internet regulation, try to learn from ICANN's mistakes, and create a new nonprofit to handle domain names. Or they could throw up their hands and give up the idea of trying to regulate Internet addresses at all. But most likely, Zittrain says, they would assign ICANN's job to a new intergovernmental treaty organization, such as NATO.

Over the long term, that would probably lead to more "top-down" governmental regulation of the Net, rather than "bottom-up" governance by users of the system that has allowed the Internet to thrive so far.

Why are there fears ICANN will become too powerful?

If ICANN survives the crisis, many people believe that it has the potential



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wield vast power over the Internet. Why? First, because if Esther Dysinger & Co. prove that they're able to successfully manage domain names, then they would be in a strong position to handle more urgent policy problems such as protecting intellectual property. While no one is asking ICANN to take on more responsibilities yet, the group could tackle problems more swiftly than the alternative: new and untested Internet regulatory agencies.

The second reason ICANN's influence could grow is that domain names are starting to be viewed as a potentially powerful method of getting Netizens to obey the law. When people register names for their Web sites, they could be required to sign a detailed contract obligating them to comply with a certain set of rules governing the sale of products, the use of someone else's intellectual property, the display of sensitive content—you name it. If they violate the terms of the contract, they would forfeit the domain name. That may sound like a particularly serious penalty, but on the Internet it's a death sentence.

While this may sound far-fetched, it appears to be the most efficient way of enforcing the law on the Net. Already, ICANN is contemplating forcing applicants for new domain names to agree to a set of rules blocking so-called cybersquatting—the practice of registering well-known corporate brand names as domain names before the actual owners have a chance to do so.

"After all the talk over the past years about how difficult it will be to regulate conduct on the Internet," says David Post, a cyberlaw specialist at Temple University School of Law, "the domain name system looks like the Holy Grail, the one place where a forceable Internet policy can be promulgated without any of the messy 'enforcement' problems."

Aware of these concerns, ICANN says it has no intention of using domain names as a form of backdoor Internet regulation. But getting people to obey the law on the Net is a daunting problem. It would be foolhardy to dismiss the idea that Internet addresses could be used as a lever to enforce important legal rights. Managing those simple .coms and .nets is a trivial matter.

By Mike France in New York

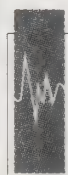
For more on the domain name controversy, see ebiz.businessweek.com.

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TOKYO'S VALLEY OF THE NETREPRENEURS

Young innovators trade business tips and nab capital



H-SAVVY: Members of Bit Valley, a business-networking group that meets regularly in Tokyo's trendy Shibuya neighborhood, a playground for students

When Japanese Net entrepreneur Satoshi Koike traveled back to his native Tokyo last February to scout out promising new E-businesses to bankroll, he was disappointed with what he found. A Tokyo convention that showcased new business ventures gave Koike a chance to meet some of Japan's new Web-savvy entrepreneurs. Some had good ideas, he says, "but nobody knew how to launch or operate a successful Net business." From the Tokyo office of Netyear Inc., the Redwood City (Calif.) E-business consultancy that he runs, Koike is at the next week working the

phones and his contacts in Japan. His goal: to organize a business-networking group aimed at helping Japan's entrepreneurs get wise to the Web.

The result is Bit Valley, a promising organization that is bringing entrepreneurs together regularly to build Japan's Internet economy. Koike believes the Tokyo group will give young innovators a way to trade business tips and attract venture capital. The organization's name is an abbreviated version of "bitter valley," the English translation of Shibuya, the hip Tokyo neighborhood where many of Japan's Netpreneurs are headquartered.

The group is starting something of a cultural revolution in Japan. In an economy long characterized by corporate behemoths and lifetime employment, a surprisingly favorable climate is emerging for nimble startups that aspire to become the next Yahoo! or eBay. As the Bit Valley group grows, its influence is spreading beyond Tokyo to the rest of Japan. Since its first meeting in March at a French-style café in Shibuya's Bunkamura theater and art center, Bit Valley's membership has swelled from 100 to more than 1,200, representing some 400 Shibuya Net businesses and the Japanese offices of Microsoft, America Online, and others. "Japan desperately needs a breakthrough movement to make way for an Internet boom," says Koike.

WAKE-UP CALL Suddenly, Japanese consumers and businesses are waking up to the potential of the Web. While the country still trails the U.S. in developing E-commerce, the importance of building a Net-bolstered economy has not been lost on the nation's traditionally conservative bureaucrats and politicians. Says Iwao Nakatani, a scholar and deputy chairman of the state Economic Strategy Council: "The government here still tends to support traditional industry, but it's well aware now that the robust growth of the U.S. economy is the result of E-commerce." As a gesture of support to startups, Japan recently approved a plan to extend more grants and financing to new ventures.

At the forefront of this new consciousness are tomorrow's consumers: Japanese high school and university students who can zip off short E-mail messages on their tiny cell phones. This information-savvy generation is fueling demand for handheld computers and other Net-ready communication devices. And it's gaining new clout here. "Japan is a few years behind the U.S. when it comes to E-business," says Taizo Son, 26, who founded online systems integrator Indigo Corp. in 1996 while an economics student at Tokyo University. "Now, though, the younger generation is starting to pop up" in a business world that for decades has been ruled by older men whose place at the top was dictated largely by seniority.

It's not just the business world that's changing. According to a survey released in June by Japan's Ministry of Posts & Telecommunications, some 17 million Japanese, or 13.4% of the population, now log on to the Web, up from 1.5 million in 1995. By 2003, the percentage of Japanese households wired to

the Net should rise to 52%, about the current level in the U.S., according to market researcher International Data Corp. "We're seeing a shift from early adoption of the Internet to mass penetration," says Joichi Ito, chairman of Infoseek Corp.'s Japanese operations.

And the Japanese aren't simply surfing: They're shopping, too. E-commerce hit \$77 billion in Japan last year—double the 1997 amount. The market is expected to grow to \$639 billion by 2003, compared with \$1.6 trillion in the U.S., according to a joint survey by Japan's Ministry of International Trade & Industry and Andersen Consulting.

There's yet another reason for Bit Valley optimism. Because of Japan's recession, large companies are no longer able to lure the best and brightest with promises of lifetime careers. The result: Students and managers alike are willing to take a chance on exciting new jobs with risky startups.

BLUE-JEAN BRIGADE. Rakuten Inc.'s 34-year-old Hiroshi Mikitani, a former banker at the staid Industrial Bank of Japan Ltd., now wears blue jeans when he visits the gray-suited bureaucrats at the Ministry of Finance to brief them on

E-commerce. Mikitani says many of his consultant and banking friends also are considering the fast pace and intellectual freedom of a Net venture. Bit Valley entrepreneur Kazuhiro Ogura, 24, went so far as to drop out of Tokyo's Hitotsubashi University to start his business, Horizon Digital Enterprises Inc., an E-systems integrator. Although Ogura graduated a year behind schedule last spring, he doesn't regret his unorthodox choice. "I couldn't imagine being in a corporate army," he says.

A flurry of recent activity promises to keep Shibuya at the forefront of Japan's tech movement. Ito, who operates Digital Garage Inc., sold his Net-search firm's interest in Infoseek-Japan in June and will use the proceeds to launch online music and concert ticket sites this fall. Nearby, Kiyoshi Nishikawa, the founder of NetAge Inc., just sold his Net Dealers online consumer-ratings service for autos to CarPoint, Microsoft's online car-locator service. With the money from the sale, NetAge plans to launch two E-businesses—retailing and E-systems ventures—in September.

To be sure, not everything is roses in Bit Valley. For starters, the govern-

ment's economic planners could do a lot more to ease costly regulations on private enterprises. Startups also want more deregulation in the stock market. As things stand, a company must show a profit for at least two business years before it can go public. That luxury that expanding Net startups often can't afford.

PROMISING FUTURE. Even here, however, relief may be on the way. Softbank Corp. founder Masayoshi Son, 42, plans to launch a Japanese Nasdaq by the end of next year, which, if approved, would do away with the stiff listing requirements of the existing market. "That means Bit Valley startups like myself will have the opportunity to list," says Indigo's Son, 26, who is the youngest of Masayoshi's three brothers.

Indeed, for the young Bit Valley entrepreneurs gathered in a crowded Shibuya bar one recent night, the future never looked more promising. The changes, for Japan, are revolutionary. True, the odds aren't high that any of these entrepreneurs will launch Japanese Microsoft. But for the time, they have the opportunity to

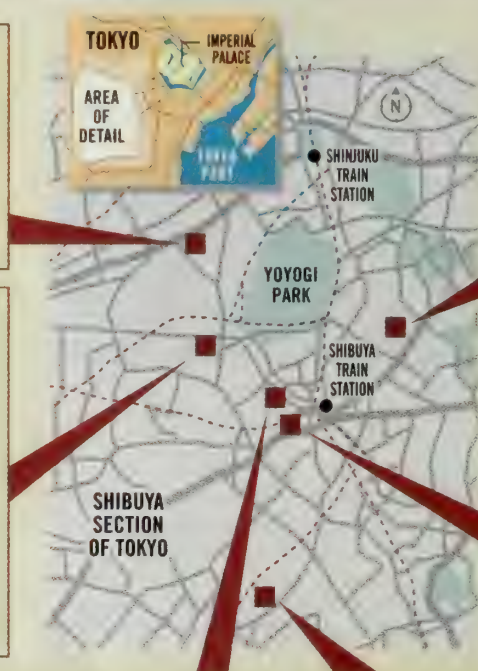
By Irene M. Kunii in Tokyo

Bit Valley Ventures Startups are springing up throughout Tokyo's Shibuya neighborhood.

INDIGO Founded in 1996 by Taizo Son when he was an economics student at Tokyo University, Indigo designs Web sites and provides E-commerce services to Japanese retailers—and U.S. cyberauctioneer Onsale.

DIGITAL GARAGE Launched in 1995 as an E-business media and market research firm, DG was Infoseek's partner in Japan until June 25, when Infoseek Japan bought the site DG created for Infoseek and named DG founder Joichi Ito as chairman. Ito, meanwhile, will transform DG into a Net incubator for E-commerce startups.

NETAGE Launched last year by former AOL Japan employee Kiyoshi Nishikawa, NetAge creates online car-sales sites. CarPoint's Japan venture bought his Net car-assessment site in June. NetAge plans to launch retail and services sites this fall.



CYBER AGENT The biggest online ad network in Japan, Cyber Agent generates 150 million ads each month for more than 200 Japanese corporate clients. Sales last year: \$170,000. Founder Susumu Fujita estimates 1999 sales will top \$5 million.

HORIZON DIGITAL ENTERPRISE Startup founded by economics student Kazuhiro Ogura in 1996 outfits small and medium-size businesses with servers and software programs based on Linux for small network systems, intranet, and E-commerce needs.

RAKUTEN Rakuten is Japan's biggest Net shopping mall, with 850 cybermerchants. It provides auction and hosting services for Japan Airlines and leading retailers such as Seibu and Hankyu. Rakuten expects to earn \$1.5 million this year, before taxes.

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MEDICINE

AN AIDS VACCINE IS NO LONGER A DREAM

"Huge progress" is spurring human trials on several fronts

The waiting is hard for Dr. Donald P. Francis. The former government virologist who helped eradicate smallpox in the 1970s is now conducting the first advanced-stage trial of a vaccine against a tougher foe—the virus that causes AIDS. The vaccine or a placebo has been given to 5,400 people in the U.S., and 2,400 more are being recruited in Thailand. Francis already knows through monitoring that some of the volunteers are infected with the dreaded virus. But he won't know if the vaccine is working until the fall of 2001, when he finds out who got the real thing or the placebo. "We're in this frustrating interval," he says.

Francis and his company, VaxGen Inc., are also way out on a limb. Many scientists believe his vaccine doesn't have a prayer of working. But even skeptics see the Phase III trial as an important milestone in the long battle against a microbe that has struck more

than 40 million people around the world. "It's our first chance to know if we're on track to have a vaccine in the next 10 years," says Dr. José Esparza of the Joint United Nations Program on HIV/AIDS (UNAIDS) in Geneva. Even more encouraging, second and third chances are waiting in the wings.

Indeed, after hundreds of animal experiments and dozens of small-scale human trials, researchers are confident that new vaccine attempts are promising enough to put to the ultimate test in people. The advances range from innovative ways to prod the immune system into attacking HIV to studies identifying vulnerable targets on the virus itself. "I've been the ultimate cynic and pessimist," says Dr. Norman L. Letvin, professor of medicine at Harvard Medical School. "But I've become very optimistic. The truth of the matter is that huge progress has been made in the last couple of years."

Progress is desperately needed—and long overdue. While new drugs are helping keep AIDS at bay in the U.S. and other industrialized countries, around the world, 16,000 people are being infected with HIV each day. Some 95% of these new victims are in the developing world, where treatments are unavailable or far too expensive (page 82). That's why "the only answer will be a vaccine," says California Institute of Technology President David Baltimore.

NO PROFIT PAYOFF. The answer has been slow coming. "We're 18 years into the epidemic,"

we've got only one Phase III trial," says Francis. "You have to ask whether we are committed to developing a vaccine or not." Part of the problem has been that drug companies can't profit from an HIV vaccine the way they can with, say, AIDS drugs or Viagra, which may be taken over and over. For tiny pharma VaxGen Human Vaccines Inc., Durham, N.C., "at first blush, it seemed we are on a suicidal path," says Chairman Robert Johnston. "We picked a target for which no one has managed to make a vaccine, for a third-world market in which no one can pay."

A few big pharmaceutical companies, such as Merck, Wyeth-Ayerst, and Rhône-Poulenc's Pasteur Mérieux Connaught unit, are supporting HIV vaccine research efforts. But there remains the sheer difficulty of the task. In its ability to evade the immune system, "HIV is especially nasty," says Baltimore.

The basic theory of vaccination is simple. First, give the body something that looks like an invading microbe. That stimulates the immune system to respond—and remember. Then, if the actual microbe does invade, the immune system is primed for a massive attack. Its response can take two forms. One is like a naval battle, where the immune system makes torpedo-like antibodies. They search for, bind to, and neutralize microbes navigating through the bloodstream. The other response resembles an army going door to door in a city, seeking enemies that are hiding indoors. The immune system's killer

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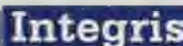
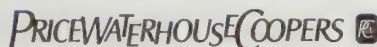
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As HIV is binding to cells, its shape changes—exposing vulnerable areas that could be good targets for antibodies

cells destroy the microbe-infected cells.

Scientists believe most vaccines follow the first method, stimulating antibodies. So when HIV appeared, researchers rushed to design vaccines to do just that. The main tack: inject a big chunk of the protein that forms an envelope around the AIDS virus, stimulating antibodies against the virus' own coat. But human trials in the early 1990s failed. The antibodies stimulated by the envelope vaccines turned out to be about as effective as popguns against a rhino. "We quickly learned that most antibodies that are elicited against the virus are notoriously incapable of neutralizing it," says Merck's AIDS vaccine chief, Dr. Emilio Emini.

VaxGen is trying to generate more potent antibodies with a vaccine that includes envelope proteins from two viral strains instead of one. But many scientists hold out little hope—and some see financial motives behind the trial. With VaxGen coming off a successful IPO on June 30, "the investors and founders will recover their investment before the efficacy data are published," says Jack H. Nunberg, director of the University of Montana Biotechnology Center. VaxGen's Francis retorts that vaccine trials have often proved the experts wrong. "All this gum-gnashing of whether ours will work or not has been true of most vaccines," he says.

Perhaps. But past disappointments with the antibody approach have led most AIDS scientists to focus on the other arm of the immune system—killer T-cells. They're trying to design a vaccine that mimics an actual infection so the body's cells will make viral proteins. That prods the T-cells into action.

One approach is to genetically modify a benign virus to carry a few HIV genes. During a brief, harmless infection period, cells will make HIV proteins along with those of the carrier virus, thus stimulating the immune system against both. The best human results have come from studies using a canary-pox virus developed by Pasteur Mérieux Connaught.

REWRITING THE CODE. The pox-virus vaccine has protected some monkeys from getting the simian equivalent of AIDS—and has stimulated the T-cell response in humans. "So far, this is the only [vaccine] injected into humans that can do that," says Dr. Michel H. Klein, Pasteur's vice-president for science and technology. "But we don't know yet if it is protective."

Other virus-based vaccines in development may be even more potent. Government and academic scientists are experimenting with a weakened version of vaccinia, the virus used to help eradicate smallpox. Based on monkey trials, "there is some enthusiasm" that it might be more effective than canary pox, says

Bernard Moss, a virologist at the National Institute of Allergy & Infectious Diseases. Scientists at AlphaVax have been able to protect monkeys from AIDS using a vaccine based on a Venezuelan equine encephalitis virus.

But virus-based vaccines aren't without flaws. The immune system reacts not only to proteins made from the genes but to proteins from the carrier virus, too, thereby dividing its attention. As a result, some scientists are experimenting with vaccines consisting of DNA with HIV genes inserted. Injected into the body, the DNA is taken up by some cells, where its genetic instructions are used to make HIV proteins. The trick is getting the cells to make enough of the HIV proteins to attract the immune system's attention. Working with Apollon Inc. (acquired by Wyeth), David B. Weiner of the University of Pennsylvania has boosted production of HIV proteins by adding a HIV gene called REV. And Merck scientists are rewriting the genetic code of HIV genes to make them look more like human genes. The researchers are getting higher levels of HIV protein enough to generate impressive killer cell responses in monkeys.

Many experts think the best vaccine will be a combination of the various candidates. "There is every reason to believe that using these together

The Path to an AIDS Vaccine

Two decades into the epidemic, researchers are coming up with some new approaches

RESEARCHERS / STRATEGY	PROGNOSIS
VAXGEN, CHIRON Inject a protein found in HIV's outer coat that stimulates the immune system to make antibodies.	Proven safe, stimulates antibodies, but many scientists think those antibodies aren't effective. VaxGen Phase III trials in progress in the U.S. and Thailand, with results expected by late 2001.
UNIVERSITY OF MONTANA Freeze the virus in the act of fusing to cells, when its coat proteins are in a more vulnerable shape, to stimulate more potent antibodies.	In early studies, antibodies stimulated in mice neutralized a number of viral strains. Too early to know if it will work in humans. Beginning primate studies.
NATIONAL INSTITUTES OF HEALTH, PASTEUR MERIEUX CONNAUGHT, OTHERS Use modified viruses, such as canary pox or vaccinia, to carry HIV genes into cells, which then make HIV proteins that stimulate the immune system to make killer T-cells.	Delivering HIV genes with a modified virus can stimulate the immune system, but it doesn't work in all cases, and subsequent vaccinations can be difficult. In human trials.
MERCK, WYETH-AYERST, UNIVERSITY OF PENNSYLVANIA Insert DNA containing HIV genes. Cells that take up the DNA then make HIV proteins, stimulating an immune T-cell response and, possibly, antibodies.	Can be effective in stimulating killer T-cells, but getting high enough levels of HIV proteins made has been a challenge. In human trials.

DATA: BUSINESS WEEK

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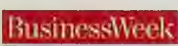
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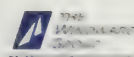


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do better than using them independently," says Harvard's Letvin. At Emory University, the most successful monkey trials used a DNA vaccine first, followed by a pox vaccine, says Harriet L. Robinson, chief of microbiology and immunology at Emory.

ACHILLES' HEEL. Moreover, there's new hope that the antibody arm of the immune system can also play a major role. Scientists now know that the envelope protein surrounding HIV is able to resist antibody attacks. But as the virus binds to cells and prepares to force its way in,

the envelope protein changes shape. That exposes its vulnerable parts, much the way a porcupine does as it uncurls, exposing its defenseless belly. The University of Montana's Nunberg has been able to "freeze" the virus in the act of binding. When he injected the frozen bits into mice, he stimulated antibodies capable of neutralizing a broad range of virus types. At the Massachusetts Institute of Technology, Peter S. Kim has been able to pinpoint the envelope protein's precise shape change—and find a newly exposed region that could turn

out to be an excellent target for bodies.

The next large-scale trial after Gen's is expected to use a combination of canary-pox vaccine and another. No one thinks it will be the ultimate answer. But scientists now can see a clear path to creating better vaccine combinations. A truly protective vaccine is still years away, but for the time since AIDS became a global scourge, the possibility of protection seems

*By John Carey in Washington
Amy Barrett in Philadelphia*

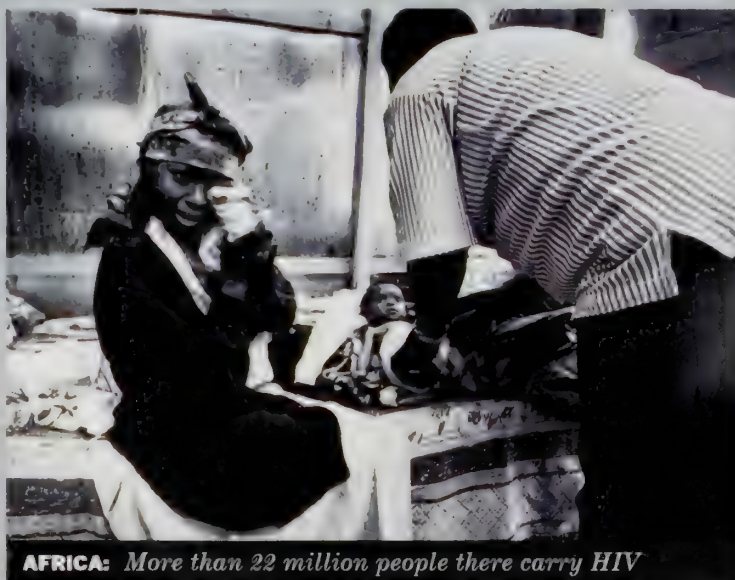
'WE HAVE TO FIND A SOLUTION'

If AIDS is the viral equivalent of a neutron bomb, then sub-Saharan Africa is ground zero. More than 22 million people there are infected with HIV—in addition to the 11.5 million who have already died. In several countries, HIV lurks in the cells of more than 25% of all adults. Elsewhere in the developing world—India and Eastern Europe, especially—the modern-day plague is also spreading unchecked.

Although new drugs have made the disease manageable for many in the U.S., such costly treatments are out of the question in countries where food is often a luxury. That's why a vaccine is desperately needed. But the task of creating and delivering a vaccine to the developing world presents even greater hurdles than making one for the West. Among them: uncertainty over how tailored a vaccine must be to different strains of the virus and how to fund vaccination programs for possibly millions of impoverished people. "We are watching the equivalent of a Black Plague," says Dr. Seth Berkley, president of the International AIDS Vaccine Initiative (IAVI). "We have to find a solution."

There are signs that the effort is picking up. While few pharmaceutical companies are pumping money into finding vaccines for the developing world, some public-private partner-

ships have taken up the challenge. The U.S. Army is funding HIV-vaccine trials in Thailand in cooperation with biotechnology company Chiron Corp. and other corporate partners.



AFRICA: More than 22 million people there carry HIV

Microsoft Corp. Chairman William H. Gates III and his wife Melinda have donated \$25 million to IAVI for vaccine research.

TWO FOR ONE? IAVI's goal is to bring together HIV-vaccine researchers with health experts in the developing world. The organization is underwriting work on an experimental vaccine from AlphaVax Human Vaccines Inc. that is targeted for South Africa, as well as a vaccine under development by Oxford University and the University of Nairobi that is based on the dominant virus circulating in Kenya. Both groups hope to start human testing next year, but even if those trials are successful, a

ready-to-use vaccine is still years away.

Adding to the challenge is scientific uncertainty over how tailored HIV vaccines need to be. The common strain of HIV in Kenya is about 90% identical to the strain found in North America and most of Europe. Researchers are unsure whether that 10% difference means a U.S. vaccine would be ineffective in Africa. Pasteur Mérieux Connaught began human trials in Uganda in February using a vaccine based on the HIV strain prevalent in the U.S. If that vaccine stimulates a response against the two strains common in Uganda, it may be possible to find one vaccine that

can be used globally.

The biggest hurdle—continued, sufficient funding—will remain. Mead Over, a senior economist at the World Bank, says a proposal has been crafted under which the bank would lend money to some AIDS-ridden countries if an HIV vaccine is developed. Another option has been floated to establish a trust fund financed by wealthy nations to pay for research and distribution of vaccines. Such a concerted effort may be the only hope if AIDS is to be kept from wiping out large swaths of the world's people.

*By Amy Barrett in Philadelphia
and John Carey in Washington, with
Heidi Dawley in London*



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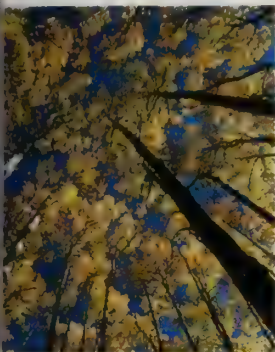
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ELLEN LICKING



TICKER PULP. NO THAT'S FICTION

FORMERLY, MAKING PAPER REQUIRES A LOT of harsh and toxic chemicals to strip wood pulp of lignin, a tough polymer that makes trees strong and rigid. Now, polymer chemist Vincent L. Chiang and a team of researchers from Michigan Technological University are trying to come up with a better solution: aspen trees that are bioengineered to produce less lignin. Their work was published in the August issue of *Nature Technology*.

To create their trees, the scientists blocked the activity of a key lignin-producing enzyme in the woody part of the tree. The result was a new strain of aspen with 45% less lignin. Surprisingly, engineered trees also grew 1.5 times faster and laid down more extensive root systems than their unmodified cousins. This may mean that more trees can be grown from less land using Chiang's trees, thus reducing the environmental impact of forestry. Since aspens aren't normally processed to make paper, so Chiang's team is trying to get the result in two more popular pulpwood species, eucalyptus and pine. "It's a great result that could make paper production easier and more economically viable," says Ronald R. Sederoff, a forestry expert at North Carolina State University. □

SWEET RELIEF FOR VICTIMS OF EARTHQUAKES

AS THE DEATH TOLL FROM Turkey's earthquake continues to climb, relief workers are busy caring for the survivors. Of these, up to 40% may be at risk for "crush syndrome," in which blood and other fluids accumulate in the muscles, resulting in substantial swelling. If left untreated, the condition can trigger kidney failure. A simple preventive measure—immediate and massive injections of fluid containing the synthetic sugar mannitol—is now being tried in Turkey. The new method was developed by Dr. Ori S. Better of the Technion-Israel Institute of Technology in Haifa.

Similar concoctions have been tried before, but two factors may give Better's formula an edge. Damaged muscles ooze toxins that, in large amounts, are poisonous to the

kidneys. By injecting big doses of fluid into the body—up to 15 liters a day—Better claims he can preserve the body's normal fluid balance. He also has evidence that mannitol alleviates muscle swelling. After less than an hour's exposure to it, 15 patients all showed signs of decreased swelling. How man-



nitil works is a mystery—and the method has its own potential dangers: In large doses, the sugar can cause kidney failure. Still, Dr. James P. Knochel, an expert on muscle injury at Presbyterian Hospital of Dallas, says: "If this has the potential to save quake victims in Turkey, it is important to try it." □

CAUTION: SLIPPERY WHEN COLD

A TEAM OF FRENCH SCIENTISTS FROM THE CENTRE national de la Recherche Scientifique and chemical company Elf Atochem have developed the first polymer that can switch from slick to sticky in response to a slight temperature rise. The results were reported in the Aug. 20 issue of *Science*.

Two key structural features—roughness of the surface and elasticity—determine a polymer's tackiness. The smoother the surface and the more pliable the polymer, the stickier it will be. Led by polymer chemist Ludwik Leibler, the scientists designed their polymer to switch between a rigid, rough crystal and a softer, elastic substance at body temperature—98.6°F. Below this temperature, the polymer has a nontacky, Teflon-like exterior. Above it, the surface is smooth and gummy.

Because the polymer turns from slippery to tacky at body temperature, experts say it could be used in a wide range of products. For instance, self-cleaning tennis grips coated with this polymer would become sticky from the hand's warmth. Drop the racket and the polymer cools off and hardens, and dirt clinging to the grip simply falls off. Or it could be used to make the first truly "ouch-less" Band-Aid—just chill the skin and that sticky bandage would slide right off. □

DECLARING A GERM WAR ON NUCLEAR WASTE

CLEANING UP RADIOACTIVE waste is a dirty job—but somebody, or something, has to do it. Now, researchers from the Energy Dept.'s Idaho National Engineering & Environmental Laboratory have devised a way to use the bacteria *Thiobacillus thiooxidans* to clean up contaminated concrete walls and ceilings.

The researchers mixed millions of bacteria with sulfur and cellulose to create a fluorescent yellow gel thick enough to be slapped on walls and ceilings. At high temperatures and humidity, the bacteria feed on the sulfur and generate the corrosive byproduct sulfuric acid, which etches the concrete so that the contaminated layers flake away. When enough concrete has been loosened, the researchers kill off the bacteria by dropping the temperature and humidity. Then they vacuum up the contaminated material. Using this method, the researchers estimate they can remove up to half an inch of radioactive concrete a year.

The traditional cleanup method, called scabbling, requires workers to chip away layers of contaminated surface concrete until they reach a "clean" layer. But this process can expose laborers to damaging levels of radiation and generates a substantial amount of rubble and dust—all of which must be disposed of as radioactive waste. Because the microbial "goo" can be applied remotely, the risk to workers is minimized. And cleanup costs could be up to 10 times cheaper, since much less waste is generated. The researchers plan to field-test their microbial janitors at a closed nuclear reactor in Selkfield, England, this fall. □

WHERE YOU
SHOULD LOOK
FOR RISING
MARKET STARS

BusinessWeek Investor

High Tech: Don't Let the Swoon Scare You Off

Carefully chosen funds can boost returns over the long haul

BY GEOFFREY SMITH

Most long-term investors should have at least some of their investments in technology stocks. After all, high tech is the engine behind the powerful U.S. economy and the bull market over the past decade. The downside: These stocks are exceptionally volatile. But their swoons create buying opportunities, and this summer has been no exception, according to many tech-fund managers.

If you're thinking of buying tech while it's down, a good way to do so while reducing the risk of owning individual stocks is to buy a high-tech mutual fund or a diversified equity fund with a big tech stake. Indeed, despite the recent pullback, specialized tech funds as a group have racked up a strong record. The 17 tech funds with five-year records tracked by Morningstar produced an average return, annualized through July 31, of 31%. That beat the Standard & Poor's 500-stock index by 4 percentage points. Last year, the overall tech group—numbering 50 funds—had an average 55% return, nearly double that of the S&P 500. Through July 31, they were up 40%, four times the S&P's return. The big numbers result in part from a handful of Internet funds with huge gains. Still, a well-chosen tech fund stands a good chance of raising your returns over the long haul.

Mutual Funds

The question is, which? There are huge variations in performance, and tech-fund strategy and risk profiles can differ radically. This year's top-performing tech fund through July 31 was Nicholas-Applegate Global Technology Fund, up 156%. The worst? Fidelity Select Software Computer Services, up 11%. The former, a young fund designed for institutions and wealthy individuals who can afford its \$250,000 minimum investment, profited from a timely switch in spring from Net stocks to a diverse group of telecom and chip issues. The Fidelity fund,

in the virtue of its narrow object had most of its assets stuck in a sluggish sector: software.

Performance numbers don't tell the entire picture, though. Before adding tech to your portfolio, you need to decide how much risk you're willing to take. Investm



specialists suggest that before you take the plunge, you should check the technology weighting in your existing portfolio. "Chances are you've already got more than you think," says Morningstar associate editor Christine Benz. Tech stocks make up 21.2% of the S&P 500, yet you already have a pretty good stake in the sector if you're heavily invested in S&P index funds. Many diversified growth funds are also loaded with



quick way to assess a tech fund's risk level is by checking its volatility vis-à-vis the S&P 500. Beta is a key statistic. A fund with a beta of 1.0 would be exactly as volatile as the market. Funds with betas above 1.0 are more volatile. Morgan Stanley's fund manager, Witter strategist Leah Modigliani, calculates that the average tech fund with three years of results has a beta of 1.35—in other words, it's 35% more volatile than the S&P 500. Funds with betas below 1.0 are less volatile. The Vanguard funds are considerably more volatile: the Vanguard Internet Fund, for one, has a beta of 1.7. But don't use beta as your sole risk guide. High betas often mean



Want to find out how much technology is in your portfolio? Check out www.morningstar.com. For a \$9.95 monthly subscription fee, Morningstar will drill down into your portfolio and tell you what your sector weightings really are. To get your Portfolio X-Ray report, all you need to do is type in your stock and mutual fund holdings and wait a few seconds for an answer.

Investors also should bear in mind that tech funds are susceptible to high capital-gains distributions that can sharply reduce pretax returns unless the fund is held in a tax-deferred account. And shun funds with high loads. Remember, tech funds have higher-than-average expense ratios, usually because managers trade rapidly in and out of stocks. This shouldn't be a problem if the fund produces stellar returns.

that own companies across a wide swath of the landscape and highfliers that focus on narrow segments, such as the Net or small companies. In general, the narrower the focus, the riskier the fund, but the higher the potential short-term return. Funds with the best three-to-five-year records tend to be diversified.

Most tech funds fare poorly in BUSINESS WEEK's risk-rating system because we use tough criteria that exclude most of them from our rankings. Our rating system, which covers all kinds of mutual funds, includes only those with

price-earnings ratios, on the other hand, may not necessarily be good risk indicators. Many of our own stocks in Net companies that have not yet posted earnings, so stocks can be left untraded in a fund's p-e ratio, resulting in a misleading indicator. www.InternetFund.com has the

Tech Funds: Choose Your Flavor

TOTAL RETURN YTD* 3-YR**			TOP HOLDINGS	FUND	TOTAL RETURN YTD* 3-YR**			TOP HOLDINGS	FUND	TOTAL RETURN YTD* 3-YR**			TOP HOLDINGS
AGGRESSIVE				DIVERSIFIED TECH				DIVERSIFIED/HEAVY TECH					
Y	98%	NA	YAHOO!, AMAZON, ARIBA	DRESDNER RCM GLOBAL (DRGTX)	34%	50%	AMAZON, AOL, YAHOO!	WHITE OAK GROWTH (WOGSX)	17%	35%	TELLABS, APPLIED MATER- IALS, LUCENT		
ER Y (VWTKX)	96	NA	ONHEALTHNET, COM21, INTEL	NORTHERN TECHNOLOGY (NTCHX)	30	53	XILINX, TELLABS, ST MICRO	JANUS OLYMPUS (JAOLX)	24	38	AIRTOUCH, AOL, CISCO		
TNET	41	NA	CISCO, MCI, INFOSPACE	FIRSTHAND TECH. VALUE (TVFQX)	76	43	APPLIED MICRO, PMC-SIERRA, IMMUNEX	SPECTRA (SPECX)	14	33	MICROSOFT, YAHOO!, TYCO		
L S	37	48%	TX INSTRU- MENTS, MICRON TECH, ANALOG DEVICES	FIDELITY SEL. TECH. (FSPTX)*	34	48	CISCO, LUCENT, NOKIA	FIDELITY AGGR. GRTH. (FDEGX)	32	37	EXODUS, MCI, QUALCOMM		

*Through July 31. **Avg. annual DATA MORNINGSTAR INC., BUSINESS WEEK

*Through July 31. **Avg. annual

What to Look for in a Tech Fund

RISK Tech funds come in many risk levels. Make sure you choose a fund that suits your tolerance for volatility—and losses.

TAXES Capital-gains distributions can be high, sharply reducing pretax returns. Consider tech funds for tax-deferred retirement accounts.

RESULTS Be wary of high short-term returns. Some funds have untested managers, so look for funds with long track records.

five years of results. Many tech funds, especially Net funds, haven't been around five years. Moreover, our system heavily penalizes funds that have wide downward swings—standard for most tech funds. But in the rapidly changing world of high tech, three years of results covers a broader range of tech funds and is sufficient to tell the winners from the dogs.

Indeed, BUSINESS WEEK's top-rated tech fund, Firsthand Technology Value, has the best five-year record of any U.S. mutual fund, with a 51.5% average annual return for the five years through July 31. It recently saw the departure of co-manager Ken Kam, who picked health-care stocks. But Kevin Landis, now the fund's sole manager, picked the bulk of its investments—mainly chip stocks—and says Kam's departure won't breed major changes.

Among diversified tech funds, there are other good choices. Morningstar's top-performing funds with below average risk ratings over the past three years include Northern Technology (BW—July 5) and Dresdner RCM Global Technology,

with three-year annualized returns of 53% and 50%, respectively. Northern Tech fund co-manager George Gilbert says he looks for "unique and durable franchises," and his fund typically holds about 100 stocks across a range of sectors. He attributes his big gains this year mainly to chip stocks such as Xilinx and STMicroelectronics. Dresdner RCM, meanwhile, has done well investing in Net, communications, and software stocks. Another fund to consider is Fidelity

Select Technology. Its appeal is due to manager Andrew Kaplan, who has been Fidelity's hottest technology managers since. He took over the fund early in 1998 and produced a 74% gain last year; he's up 34% through July 31 by taking big stakes in telecom stocks. Investors who want to gamble on big returns might also consider a fund run by managers with strong track records. A leader in this group is Amerindo Technology, up 98% through July 31, run by veteran tech investor Alberto Vilar.

Some diversified equity funds with heavy weightings can also give your portfolio a boost with less risk than a pure tech fund. The Batteredman, a financial planner in Wausau, Wis., likes White Oak Growth, a five-star Morningstar fund with more than half its assets in technology and average annual growth of 35% over the past five years. "I don't like to put all my assets in one sector," Batterman says, adding that White Oak typically rotates out of poorly performing industry sectors.

Another highly rated aggressive growth fund with heavy tech exposure is Janus Olympus. With 45% of its assets in tech, it boasts an average return over the past three years. Manager Claire Young gets fast-growing companies where she finds them and owns Tiffany, Time Warner along with America Online, and eBay. Olympus has a beta of 1.1, meaning it has achieved its gains with just a bit more volatility than the S&P. Whether you're interested in a pure play or a more diversified fund, it's not hard to spice up your portfolio by picking a performer with the high-tech exposure you want.

IT'S ALWAYS A GOOD TIME TO INVEST IN TECHNOLOGY

Alberto Vilar manages the Amerindo Technology fund, with a return of 98% through July 31 on top of an 85% return in 1998. The 25-year veteran investor specializes in future tech superstars. One prescient buy was America Online—his cost was 36¢ a share. A big fan of Net stocks, Vilar has only 14 issues in his \$171 million portfolio, including Yahoo! and eBay. He chatted with Boston correspondent Geoffrey Smith:

Q: Is now a good time to invest in a technology fund?

A: It's always a good time to invest in technology. We're in the early stages of the third major generation of the technology revolution. The first generation was the mainframe. The second was client-server computing. Now, we are in the Internet

stage, and there is nothing on the horizon that will succeed this. A significant amount of global gross domestic product will be digitized through the Net. Every investor needs to participate in this explosion.

Q: Why do you focus your fund on such a small number of Net stocks?

A: We try to pick tomorrow's winners. The Internet is the future of technology, and if you're not [invested] in the Internet, you're not in technology. Any portfolio that doesn't have Internet stocks is going to underperform.



SAVVY: Amerindo's Vilar

Q: How do you value tech stocks?

A: Standard valuation strategies don't apply when you have an explosive new technology. I look at a wide range of things—Internet usage data, market share, top-line growth, margin expansion, whether companies have first-mover advantage. High valuations will not keep me away, but our goal is to get there early.

Q: What is the outlook for tech stocks for the rest of the year?

A: The bulk of the correction has taken place. At our high point this year, we were up 125%. [Before yearend] we'll blow right through that.



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How to sort out health-care options for the self-employed

BY ELLEN HOFFMAN

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Obtaining health insurance if you're leaving the corporate fold or already on your own can be a grueling endeavor. Ask Ruth Sheridan, a freelance business writer from New York. When she wanted a change from her health maintenance organization recently, Sheridan turned herself into a one-woman search engine. She scoured the yellow pages, read articles, and grilled friends to find insurance companies with plans for the self-employed. A physics major in college, Sheridan also explored coverage through her alumni association, the national physics honor society, and the National Writers Union. Then, Sheridan made a spreadsheet to compare premiums, out-of-pocket costs such as copayments and deductibles, and coverage of such services as flu shots, Pap smears, and prescription benefits.

Eventually, Sheridan signed up for a policy through the Dramatists Guild, which she was eligible to join because she had written a play. The policy's selling points: It allowed her to go out of network and provided coverage for preventive measures such as physicals and mammograms.

Comparison-shopping is a must if you're self-employed and in the market for health coverage, says Maryland Insurance Commissioner Steven Larsen. "People don't think anything of going from Best Buy to Circuit City and several other stores to save \$50 on a television set," he observes, but often they don't devote similar energy to finding a health policy that will protect them and their family when they really need it.

MANY CHOICES. Effort is necessary. Not only does coverage vary from state to state, but premiums can differ widely even within one state, says Alpha Center, a Washington, D.C., non-profit health policy center. Its March, 1998, study showed that the monthly premium for an individual California Blue Cross/Blue Shield policy for a 45-year-old could cost anywhere from \$97 to \$211; for a 60-year-old it ranged from \$172 to \$339. A commercial insurer offering a similar policy charged 45-year-olds \$229 to \$403 per month, and as much as \$807 for someone of 60.

Despite the disparate choices, there are some common options that experts recommend you check out in your search. If you're leaving a corporate job, you may continue your health in-

surance under the federal Consolidated Omnibus Budget Reconciliation Act (COBRA). But you must pay the entire premium, including the portion that your employer paid before, and the insurer may charge up to 102% of the total charged to the employer for current employer. Remember that you're guaranteed coverage for 18 months. Ask your employer for details before you leave.

The federal Health Insurance Portability and Accountability Act provides extra protection for individuals with preexisting medical conditions.

If they have exhausted their COBRA or other options for continuing coverage, they must be offered at least two individual insurance options. The rules are complex, though, and states have wide latitude in implementing the law. To find out if you qualify, consult with your state insurance department. Be warned that policies that cover a preexisting condition—for example, diabetes—often cost more than a standard policy.

If your COBRA coverage has ended or if you want a less pricey policy, Larsen suggests you call your state insurance department for a list of companies that offer individual policies. Many states provide consumer tips and summaries of the benefits they mandate. You can also ask an insurance agent to search for you. Martha Spenny, vice-chair of the individual insurance committee of the Health Insurance Association of America, says when choosing an agent, "ask how much health insurance they sell. An agent who sells \$100,000 in premiums annually probably knows the business and products out there pretty well."

When considering a particular policy, Spenny advises, "ask the agent how many years the product has been on the market in that state. A new policy could turn out to be mispriced," she cautions. If claims are more expensive than the company anticipated, you might find y

Costs can vary wildly—from \$97 to \$807 per month for Blue Cross/Blue Shield for a Californian of 45

of hypertension/symptomatic pulmonary disease
Condition, injury
symptoms, diagnosis, medical history
varicose veins of the lower extremities

FLEXIBLE PLAN. In recent years, Uncle Sam has created a new health insurance option. Called a Medical Savings Account (MSA), it's available only to the self-employed or people who work for businesses with 50 or fewer employees. Modeled on the Individual Retirement Account, the MSA is

You may put up to 60% of the amount of the deductible on your insurance policy (and up to 75% for a family policy).

To start an account, you'll need the cash to pay the premium and all your expenses up to the high deductible, as well as contribute to the account. A costly illness shortly after opening an MSA can quickly leave you with an empty account and a bill for next year's insurance premium. In fact, however you go about it, insurance shopping is not easy. But with careful research, you can find options that will give you peace of mind and protection against medical bills draining your savings. □

Information on how medical savings accounts work and a list of insurance companies that sell them



What Am I Bid for This Well-Aged Bottle?

To buy vintage wines, auctions are the place to go

BY WILLIAM ECHIKSON

So you want to buy a special wine to celebrate the millennium. How about a double magnum of 1870 Château Lafite Rothschild? Unfortunately, similar thoughts have occurred to many other wine lovers, too. When Christie's auctioned a bottle of that rare Lafite in London this summer, it went for \$44,000. At a Christie's auction in New York in June, select red Burgundies went for three times their top estimates.

Wine auctions are booming on both sides of the Atlantic, fueled not only by preparations for millennium celebrations this New Year's Eve but also by a strong economy and an easing of American laws on liquor sales. New auction houses are pouring into the



Strategies for Oenophiles

TARGET OLDER VINTAGES Auctions are best for hard-to-find wines, especially those more than 40 years old. Retailers may offer better buys on younger vintages.

THINK BORDEAUX It offers the most liquid market and may be the best long-term investment. While California, Italian, Spanish, and Australian wines are showing up at auctions, they don't have much of a price history. Prices of rare California wines seem particularly inflated.

BID OVER THE NET Online wine auctions are on the rise, increasing the number of available bargains. Web auction leaders include Morrell & Co. (winesbymorrell.com; 212 688-9370) and eBay's Butterfield & Butterfield (www.butterfields.com; 415 861-7500).

AT SOTHEBY'S: field, challenging dominance of n leaders Christie Webber's wine Sotheby's. Sales the Internet s

provide further stimulus. But while major auction houses have sales scheduled for September, good buys are getting harder to find. "The market is hot," says Christopher Burr, Christie's director of wine sales.

REPEAL OF BAN. Rather than bid for bargains, serious oenophiles flocking to the auctions to search for "rarities more than 40 years old no longer can be found in retail outlets," according to Lindsay Ham

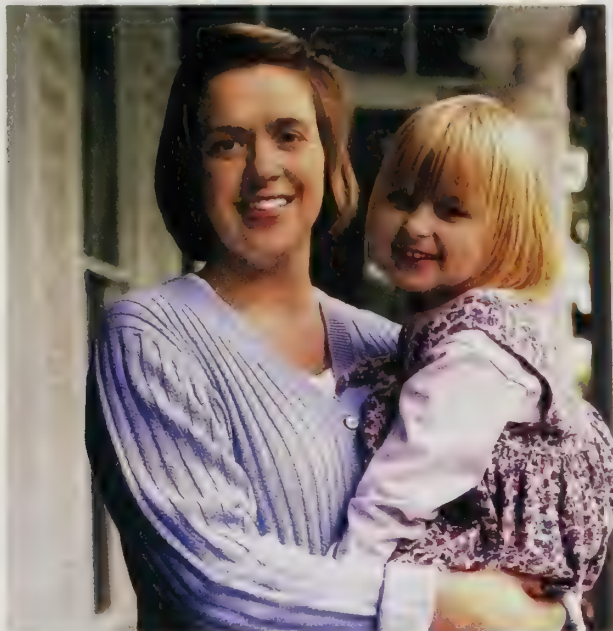
of Farr Vintners in London. Indeed, when you're bidding in the salesroom or over the Internet, vintage Bordeaux continue to dominate the fine-wine trade, accounting for 65% of auction sales. But younger California reds, such as Screaming Eagle and Colgin, are making appearances. Christie's recently sold three bottles of 1994 Screaming Eagle Cabernet Sauvignon for \$3,335, up 389% from the wine's last sale. Italian, Spanish, and Australian wines are edging their way onto the auction scene.

Today's hot market is a far cry from the only a few years ago. New York State acted to forbid liquor auctions, but since the law was repealed in 1994, New York has become the world's wine-auction capital. As interest in wine auctions soars, competition is driving commissions down. Sotheby's and Christie's, and traditional auctioneers, charge both buyer and seller 10% of the price. But one newcomer, Acker Merrall & Condit, a New York City store—charges only the buyer. It is also offering wines that are less rare and lower-priced than those at Sotheby's or Christie's. Says Acker Merrall & Condit President John Kapon: "Not everyone can spend \$44,000 on a bottle of wine."

AT CHRISTIE'S: Last spring, Acker Merrall & Condit hooked up with LiveBid.com, an Amazon.com subsidiary, to

a real-time Internet wine auction. Even though the computer system broke down, \$600,000 worth of bottles were sold. Now Sotheby's and Christie's are considering online auctions. Web auction giant eBay, which owns Butterfield & Butterfield in San Francisco, an auction house that handles fine wine sales, plans to announce an aggressive wine-auction strategy soon. But most states still bar individuals from receiving wine by mail.

Before you bid, remember that in some cases, it can be cheaper to forgo an auction altogether and buy at retail. London dealer Hamlyn, for example, sells cases of 1982 Petrus for \$17,000, while recent auction prices have gone as high as \$22,500. Still, if you're looking for that special bottle to grace your cellar or cap a millennium gala, auctions remain the way to go.



The Mardens can't explain how Benchmark Notes helped them finally own a home. But they can certainly tell you what it meant to them.

Little do the Mardens know, but the home they can finally call their own was made possible with financial innovation from Fannie Mae. When we saw investor demand for safety and liquidity in a shrinking Treasuries market, we also saw a golden opportunity. So we issued our first Benchmark NotesSM, a noncallable intermediate maturity debt security. They successfully met investor needs, and so far every issue has been oversold.

And for the Mardens? It means their dream of homeownership came true — just like it did for the more than four million families we served in 1998. At Fannie Mae, we are constantly looking for new ways to make sure low-cost mortgage funds are readily available for families just like the Mardens all across America.

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www.fanniemae.com

HOW TASTY IS MARTHA'S IPO?



BY ROBERT BARKER

Stock from Martha Stewart Living Omnimedia is almost sure to be popular—at first. But the average investor should use great care in sampling this dish

Turning plain circles of cork into beautiful beaded coasters, as Martha Stewart recently demonstrated on TV, is the last thing you'll ever catch me doing. I wouldn't know a glue gun from a Glock. But when I recently heard that Martha has begun crafting an initial public offering for sometime this fall, I had to wonder: Could this be a good thing?

Just one look at the securities filing for her company, Martha Stewart Living Omnimedia, makes quite an impression. Her two magazines reach nearly 10 million readers. Her Emmy-winning TV show can be seen six times weekly across the U.S. Her 27 books have sold more than 8.5 million copies, her radio show reaches 1.5 million listeners each weekday, and her column appears in 233 newspapers. Martha as an Internet play? Her Web site, marthastewart.com, each month hosts 627,000 visitors.

Brilliantly, Martha has exploited her omnipresence by "omni-merchandising." That's Martha-speak for selling some 2,800 items, from towels and linens to house paint and \$39 garden clogs, every which way—via her Martha by Mail catalog, the marthastore at her Web site, or through such big retailers as Kmart and Sears. Last year, her company took in total revenues of \$180 million and posted operating income of more than \$27 million. That was good enough for John Doerr, who is to venture capital what Martha is to hors d'oeuvres. With his partners at Silicon Valley's Kleiner Perkins Caufield & Byers, backers of such miracle stocks as Amazon.com, Doerr in July put \$25 million into the company. He also joined the board, where he is set to guide Martha's budding E-commerce business.

Led by Morgan Stan-

ley Dean Witter, the underwriters have set a price or the number of shares to be sold. At whatever price, I have little doubt the deal will prove popular—at least at first. That's exactly why most investors need to take care in this deal: Any quick gains will go to the few investors lucky enough to get shares at the offering price—a prize reserved for broker-firms' best customers. That's certainly not you, and it probably isn't you, either.

BLIP OR OMEN? A better bet may be simply to wait. Yes, you risk cursing your caution if the stock goes cyberspheric. But you'll have facts to comfort you: The company's financial statements show that its rapid growth is slowing (table). Revenue gains of 36% last year tailed to 26% in this year's first quarter. Worse, operating income, which in 1998 surged 65%, fell less than 7%, as costs rose and margins narrowed. A blip? Martha Stewart declined to comment, but her company's securities filing says

"We expect these expenses to continue to increase through the remainder of 1999." After the hype of the IPO wears off, these financial realities could bear down on the stock.

If you're still eager to own shares in Martha, it's also worth recalling another once-convincing IPO, the June, 1997, deal that brought Polo Ralph Lauren public. There may, in fact, be no better analog for Martha than Ralph Lauren. By dint of their own style and smarts, each has created enduring, richly profitable brands. And since going public, Polo Ralph Lauren hasn't released its sterling money clip: It kept investing, and profits keep growing. The stock, first priced at \$25, closed higher than \$32.38. It plunged last year to \$16. Today, it bumps around \$20. In his IPO, it seems Ralph got full price.

Would you expect Martha to do one whit worse? Me neither. So I'm zeroing in on John Doerr valued Martha's company. He was around to comment, in July, his firm's \$25 million bought 5%, plus a warrant allowing it to cash in on Martha's Internet op-

tion. Doerr's deal indicates a value of about \$1 billion. Linda Killian, a manager of the IPO. Aftermarket Fund, thinks the offering will create a market value of at least \$1 billion. Keep in back of your mind the gap between those numbers if you find yourself wondering at the price Marthastock is a good thing.

For barker.online, go to www.businessweek.com/investor/ or AOL, keyword: BW Daily.



Martha's Numbers

	1998	1999*
GAIN IN REVENUES	36%	26%
GAIN IN OPERATING INCOME	65	7
OPERATING MARGIN	15.2	13.9

*Quarter ended Mar. 31

DATA: MARTHA STEWART LIVING OMNIMEDIA

QUESTIONS? COMMENTS? E-mail barkerportfolio@businessweek.com or fax (407) 728-1711

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2. Choose **Create a location for use with new access phone numbers or an ISP option** and click "Next."
3. In the "Add Location" window, type a name for the location (for example, TCP/IP location).
4. Choose **Add a custom connection (for example TCP/IP)** and click "Next." A TCP/IP location will be created automatically.



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PHOTO ENLARGEMENT



ENE G. MARCIAL

Concord Camera
for new
ready gear.
Jersey's
Middlesex Water
get lapped up.
New Century
Financial looks like
a hot duck, too

Some big investors' excitement over Concord Camera (LENS) goes way beyond the solid earnings it posted on Aug. 26. Here's why these pros are accumulating shares: Concord is poised to make a digital camera, said to be co-developed with Hewlett-Packard, and will also introduce a "digital image-capture" product that can transmit pictures to a cell phone. The latter is being co-developed, says one pro, with a major European wireless-phone company.

The digital camera, which sources say will carry the HP name, uses a chip to deliver images to a PC or directly to a printer. One reason for HP's interest in a digital camera, says one money manager, is the windfall it could bring to its printer and ink business. Concord's other product (digital image-capture camera) uses radio waves to transmit to cell phones—or to the Net.

The new products will catapult Concord from a camera maker to a technology company, says Ulysses Yannas, an analyst at investment firm Mercer, Bokert, Buckman & Reid. The digital camera, he figures, will help nearly double Concord's earnings, to \$1.10 a share in the year ending June 30, 2000, on projected sales of \$135 million. In fiscal 2001, Yannas expects earnings of \$1.40 a share on sales of at least \$175 million. Yannas thinks Concord, now at 7%, is way undervalued: Trading at just 6.3 times estimated 2000 earnings, the stock is worth 21, he says.

Concord is the largest publicly traded manufacturer of disposable cameras in the world, supplying Eastman Kodak, Polaroid, Bayer's Agfa-Gevaert subsidiary, and Mattel's Fisher-Price unit. It is also a big private-label supplier to Wal-Mart Stores, Kmart, and Sears. Concord CEO Ira Lampert says manufacturing deals with other noncamera companies are in the works.

MIDDLESEX WATER: THIRSTY NEIGHBORS?

Water is hot, and more of it than most people realize is sold by publicly held companies. Stock picker Charles LaLoggia, who has been high on water utilities since December as potential takeover targets, has seen two of his picks bought out in the past three months: Aquarion, operating in Connecticut, received a bid in June from Britain's Yorkshire Water, and United Water Resources, based in Harrington

Park, N.J., got an offer on Aug. 23 from France's Suez Lyonnaise des Eaux. Two others got acquired earlier in the year. So who's next?

LaLoggia, editor of *LaLoggia's Special Situation Investor* newsletter, is convinced that Middlesex Water (MSEX), which serves parts of New Jersey and Delaware, will attract one of the majors for two important reasons: Middlesex is an unrecognized "growth" water utility, and its operations are near the regions that the acquisitive outfits serve. Among them: American Water Works, which is acquiring National Enterprises, has operations in New Jersey; Philadelphia Suburban, which has bought Consumers Water, operates in Philadelphia adjacent to New Jersey; and New Jersey's United Water.

In January, Middlesex won a contract to provide services to the water and waste systems in Perth Amboy, N.J., and on May 13, the company was granted authority for an 11.5% rate increase. These two factors, says LaLoggia, led to a 30.4% rise in sales, to \$13.8 million, in the latest quarter, and a 50% jump, to 51¢ a share, in earnings.

LaLoggia figures that in a buyout, Middlesex, now at 28¢ a share, is worth 43, based on the takeover price of its peers.

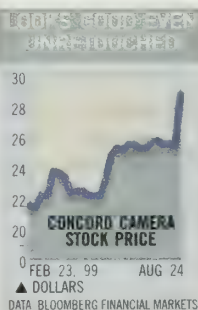
NEW CENTURY MAY GET A NEW OWNER

It has been a tough grind for subprime mortgage lenders, particularly for the underfinanced small fry in the business. Many of them have either gone under or been acquired by larger companies. One survivor that some money runners believe is buyout-bound is New Century Financial (NCEN), which has had impressive growth in total assets, revenues, and earnings.

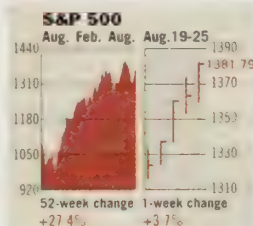
"We won't be surprised if New Century gets taken over," says investment manager Vince Carino, president of Brookhaven Capital Management, which has accumulated a 10% stake. New Century provides loans—secured primarily by first mortgages on single-family homes—to borrowers with impaired or limited credit profiles.

Although the stock has already climbed from 10 a share in late March to 17, Carino argues that New Century is still "ridiculously cheap." Trading at just 5.6 times his 2000 estimated earnings of \$3 a share, the stock is worth 25 to 30 in a buyout, says Carino. He figures the company will earn \$2.50 a share in 1999, vs. last year's \$2.03.

Some pros believe a likely buyer is U.S. Bancorp, which already owns 23% of the stock. U.S. Bancorp "sees New Century as a vehicle for growth, and that's the reason it has bought into the company," says one big investor. Both U.S. Bancorp and New Century declined comment.



STOCKS



COMMENTARY

The market ended the week with a sigh of relief. After the Federal Reserve's much-anticipated interest rate increase of 25 basis points on Tuesday, the Dow Jones Industrial Average hit new highs. And the S&P 500 and the Nasdaq Composite finished the week at their highest levels since mid-July. The bond market also rallied, with the 30-year Treasury bond at its lowest level since the end of May.

Data: Bloomberg Financial Markets

U.S. MARKETS

	Aug. 25	Week	Year
Dow Jones Industrials	11,326.0	3.0	31.7
Nasdaq Composite	2805.6	5.6	56.0
Nasdaq 100	2460.9	6.2	77.3
S&P MidCap 400	404.9	1.1	24.4
S&P SmallCap 600	180.3	0.5	9.5
S&P SuperComposite 1500	289.6	3.4	25.8

SECTORS

	Aug. 25	Week	Year
S&P/BARRA Growth	787.6	5.4	30.2
S&P/BARRA Value	616.8	1.8	22.0
S&P Basic Materials	135.0	-1.2	18.6
S&P Capital Goods	1047.8	4.0	29.5
S&P Energy	890.1	-0.1	28.2
S&P Financials	140.3	1.7	13.9
S&P REIT	80.2	-0.5	-13.4
S&P Transportation	683.7	3.8	7.2
S&P Utilities	263.6	5.0	9.8
GSTI Internet	441.8	5.3	176.8
Morgan Stanley Cyclical	595.9	1.0	32.7
PSE Technology	639.0	4.9	87.7

BEST-PERFORMING GROUPS

	Last month %	Last 12 months %
Instrumentation	22.9	124.3
Semiconductors	21.9	118.5
Metals	9.9	79.3
Machine Tools	8.7	73.5
Household Products	8.4	73.1

GLOBAL MARKETS

	Aug. 25	Week	% change
S&P Euro Plus	1374.9	3.1	
London (FT-SE 100)	6369.5	2.7	
Frankfurt (DAX)	5400.3	3.2	
Tokyo (NIKKEI 225)	17,855.2	-0.2	
Hong Kong (Hang Seng)	13,479.1	3.7	
Toronto (TSE 300)	7223.5	2.6	
Mexico City (IPC)	5379.9	4.1	

FUNDAMENTALS

	Aug. 24	Week ago	% change
S&P 500 Dividend Yield	1.20%	1.23%	
S&P 500 P/E Ratio (Trailing 12 mos.)	32.2	31.6	
S&P 500 P/E Ratio (Next 12 mos.)*	24.1	23.7	
First Call Earnings Revision*	-0.04%	-0.11%	

*First Call Corp.

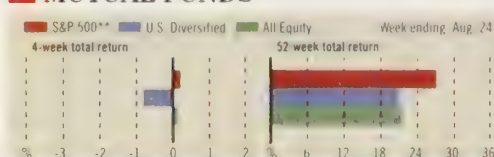
TECHNICAL INDICATORS

	Aug. 24	Week ago	% change
S&P 500 200-day average	1283.6	1277.9	
Stocks above 200-day average	43.0%	43.0%	
Options: Put/call ratio	0.52	0.54	
Insiders: Vickers Sell/buy ratio	1.40	1.36	

WORST-PERFORMING GROUPS

	Last month %	Last 12 months %
Pollution Control	-27.6	
Life Insurance	-13.4	
Drug Chains	-12.5	
Forest Products	-9.4	
Personal Loans	-9.2	

MUTUAL FUNDS



Data: Morningstar, Inc.

*Vanguard 500 Index fund

EQUITY FUND CATEGORIES

Leaders	Four-week total return	%	Laggards	Four-week total return	%
Japan	9.8		Communications	-3.7	
Natural Resources	7.3		Latin America	-3.3	
Diversified Pacific/Asia	6.5		Utilities	-3.1	
Precious Metals	5.7		Small-cap Value	-2.4	
Technology	4.5		Financial	-2.3	
Leaders	52-week total return	%	Laggards	52-week total return	%
Technology	87.8		Real Estate	-2.9	
Pacific/Asia ex-Japan	86.1		Small-cap Value	5.0	
Japan	77.1		Europe	5.1	
Diversified Pacific/Asia	69.9		Precious Metals	7.7	
Communications	48.9		Financial	8.9	

INTEREST RATES

KEY RATES	Aug. 25	Week ago	Year ago
MONEY MARKET FUNDS	4.72%	4.69%	5.10%
90-DAY TREASURY BILLS	4.91	4.76	5.06
1-YEAR TREASURY BILLS	5.13	5.19	5.16
10-YEAR TREASURY NOTES	5.72	5.88	5.26
30-YEAR TREASURY BONDS	5.85	6.01	5.44
30-YEAR FIXED MORTGAGE†	7.76	8.04	6.99

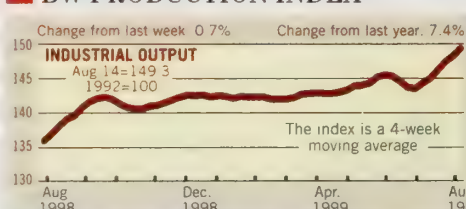
BLOOMBERG MUNI YIELD EQUIVALENT

Taxable equivalent yields on AAA-rated, tax-exempt municipal bonds, assuming a 31% federal tax rate

	10-yr. bond	30-yr. b
GENERAL OBLIGATIONS	4.90%	5.53%
TAXABLE EQUIVALENT	7.10	8.01
INSURED REVENUE BONDS	5.08	5.81
TAXABLE EQUIVALENT	7.36	8.42

†BancQuote, Inc.

BW PRODUCTION INDEX



Information on each of the index components is at www.businessweek.com. BW production index Copyright 1999 by The McGraw-Hill Companies

The production index was up for the consecutive week. However, in the ended Aug. 14, the unaveraged index dipped 0.3%, to 149.7, from 150.2. seasonal adjustment, the production of autos, electric power, crude oil, and freight traffic increased. Lumber production declined 4.7%, reflecting some slow home building. Output of steel, trucks and coal also dropped.

THE WEEK AHEAD

NEW HOME SALES Monday, Aug. 30, 10 a.m. EDT

► New homes likely sold at an annual rate of 910,000 in July, says the median forecast of economists surveyed by Standard & Poor's MMS, a division of The McGraw-Hill Companies. In June, 929,000 homes were sold. Higher mortgage rates suggest the robust housing sector may be peaking.

CONSUMER CONFIDENCE Tuesday, Aug. 31, 10 a.m. EDT

► The Conference Board's index of consumer confidence probably dipped to 134.9 in August from 135.6 in July. Household optimism remains historically quite high.

NAPM SURVEY Wednesday, Sept. 1, 10 a.m. EDT

► The National Association of Purchasing Management's business index likely rose to 54.5% in August, from 53.4% in July. A reading above 50% indicates that the factory sector is expanding.

CONSTRUCTION SPENDING Wednesday, Sept. 1, 10 a.m. EDT

► Outlays for building projects probably increased 0.3% in July, says the S&P MMS survey, after rising 0.5% in June.

LEADING INDICATORS Wednesday, Sept. 1, 10 a.m. EDT

► The Conference Board's composite index of leading indicators probably

edged up 0.2% in July, on top of a 0.3% gain in June.

EMPLOYMENT Friday, Sept. 3, 8:30 a.m. EDT

► The S&P MMS median forecast expects that nonfarm payrolls increased 218,000 in August, after a larger-than-expected 310,000 jobs were added in July. The unemployment rate is expected to remain at July's tight 4.3%.

BusinessWeek ONLINE

For more investment data and the components of the production index, visit www.businessweek.com.

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This Week, Online

Business Week presents frequent live chats on America Online—your opportunity to ask questions about timely topics.

Tuesday

How brightly does your favorite stock shine in Standard & Poor's ranking system, STARS? Ask Sam Stovall, S&P sector strategist, in this chat co-hosted by S&P Personal Wealth, the financial-planning tool. **Aug. 31 4:30 p.m. EDT**

Thursday

The Nevis Fund tops BW's latest Mutual Fund Scoreboard. And David Wilmerding, the fund's manager, can guide you to hidden gems in the stock market. **Sept. 2 9 p.m. EDT**

Transcripts

Thanks to our twice-weekly investment chats, the transcript library is loaded with ideas for you to check out.

Transcripts of all conferences are available for downloading from the BW Online area on AOL

BusinessWeek **ONLINE**

A HEALTHY SHAKEOUT IN NET STOCKS

It has been a wild summer for Internet stocks. The high reached in July was followed by the first great Internet sell-off in August. IPO euphoria, then IPO sadness. Dreams of getting rich quick—and young—became real, then were tempered. Even though Net stocks have recovered from their lows, does the giant sell-off mean the end of the Internet stock boom? Will it close the great capital spigot pouring billions into new Internet enterprises? Some say yes. We say no.

In fact, the shakeout may indicate that dot.com mania is starting to evolve into market maturity. Only now is stock pricing beginning to reflect the true financial prospects of the hundreds of Net companies out there. And only now are investors starting to distinguish between those that have profits and those that don't, those with significant revenue growth and those without, and those that have major market share and those that don't. Investor discrimination is a good thing, not something to anguish over. Taking air out of the Net bubble makes the market as a whole much more sustainable.

Not that the shakeout hasn't been painful, even for those companies that have successfully raised capital. At its low in early

August, Amazon.com Inc. was down 60% from its 52-high. E*Trade Group was down 67%, MarketWatch.com TheStreet.com 72%, and Yahoo! 50%. E-Loan's initial offering was priced at 14, went off at 20% on June 29, shot 63 on July 6, only to tumble below its first-day price by August (page 60). It has since rebounded to 40, and most other Net stocks are off the bottom, too. But for Net companies that had hoped to use high-price stock to buy other companies and rapidly expand market share, the gyrations were quite a blow. Web folks working their 24-7 days hoping to hit it big fast got a cold dose of reality.

But a salubrious one. The Net bubble deflated smoothly. Had it popped, it could have brought down the entire market and perhaps the economy. There is still plenty of froth. Red Hat, which offers the Linux operating system but has no profits, had a recent IPO priced at 14, soared to 90 in days, and now trades at 73. But risk and reward are a bit more closely matched. Institutions are beginning to ask what individual Net stocks and IPOs are really worth. For the economy as a whole, the boom in Net stocks was a plus. If we're lucky, we got off easy.

SORRY, EUROPE—A U.S. CRASH ISN'T COMING

A scary rumor is floating around European financial circles this summer: The U.S. economy is about to tank. A lot of it is *schadenfreude*, but the logic of the argument is worth examining. The danger is that it contains just enough truth to turn investors into believers. We're not, and here's why.

The argument is a variation on the bubble theme. It starts with one true thing: The U.S. is running a record current-account deficit in its balance of payments that will soon hit 3.7% of gross domestic product, surpassing the 1986 record of 3.6% of GDP, which triggered a major dollar crisis. Therefore, runs the argument, another dollar crisis is inevitable, and soon. This will make U.S. investments by foreigners less attractive, cause an overpriced stock market to crash, and lead to a recession by 2000. Consumers, saving nothing, running up big debts, and relying on stock market gains for spending, will fold. At the same time, faster-than-expected expansion of European and Asian economies will draw capital away from the U.S., worsening the market collapse.

There is no denying the American dependence on foreign capital to finance its yawning account deficit. Through August of this year, the U.S. sold foreign investors almost \$45 billion in equities, \$113 billion in corporate bonds, \$63 billion in government-agency paper, and only \$13 billion in Treasury securities. And in the first quarter alone of 1999, there was a net inflow of nearly \$50 billion in direct foreign investment.

But odds are extremely low that this flow of overseas capital will cease financing the U.S. trade deficit. The current-account

deficit is already poised to begin shrinking in the months ahead. U.S. exports are up dramatically, thanks to higher European, Asian, and even Latin American growth. Export volume already rose at a 22% annualized pace over the past three months. Imports are growing fast, too, but the acceleration is likely to stop. The trade gap will probably narrow and reduce the downward pressure on the dollar. Rising exports will also sharply increase profits for U.S. corporations, making their stocks more attractive to all investors, including those overseas. Improving European and Asian economies have already led to a substantial boost in U.S. corporate profits. Earnings growth is expected to come in at 20% or more for the third quarter.

The Fed, too, is cooperating. Its small, gentle tightening measures appear to be taking the air out of the second, and perhaps more important, asset bubble in America after stock housing. Higher mortgage rates have cut refinancing activity, setting the stage for a cooling of home building and consumer spending. That should also help cut the trade deficit as consumers buy fewer imports.

There is always the danger that investors could make the European scenario a self-fulfilling prophecy by pulling out of U.S. markets in anticipation of a crash. Or, policymakers could sharply increase interest rates—to prevent the dollar from falling further—and wind up triggering a major market decline. But a smarter bet would be that the rebalancing going on in the world economy will prove beneficial to U.S. growth—and to equity markets.



Michael A. Barger
CFO, Centra Health on the importance of vision:

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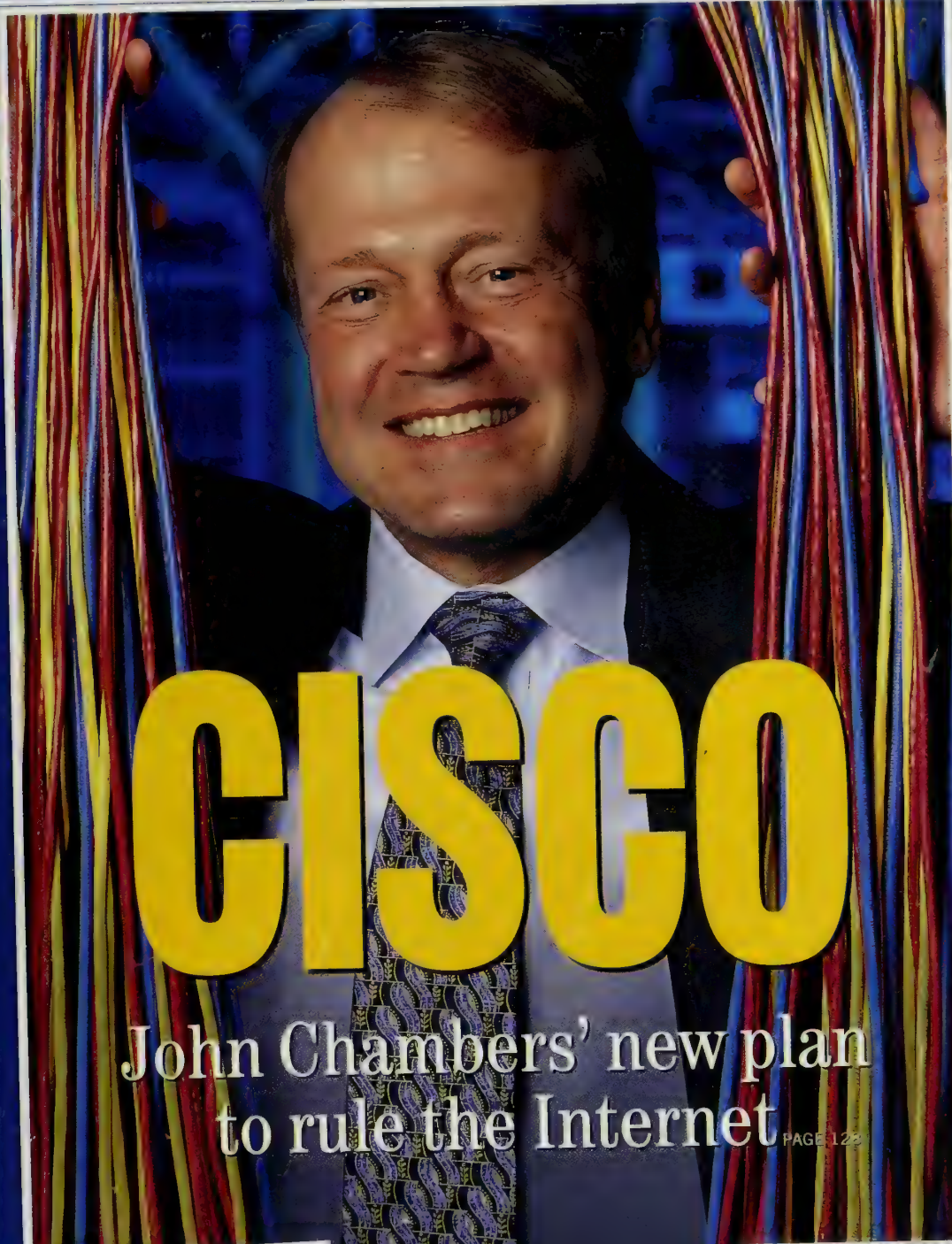


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CISCO

John Chambers' new plan
to rule the Internet

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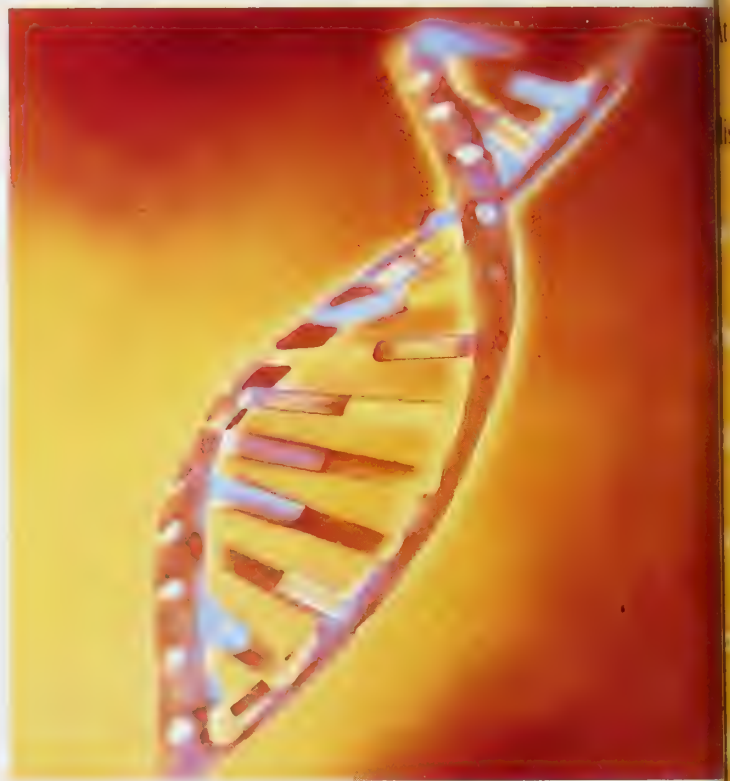


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CISCO

CEO John Chambers has a new plan to rule the Internet—and the way things are going, he just might pull it off *page 128*

ITCHY CAPITAL

Churning is changing the way companies are being managed *page 72*



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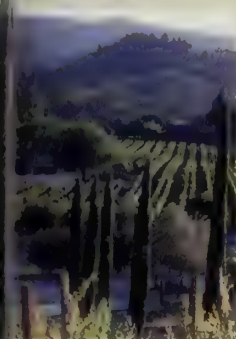
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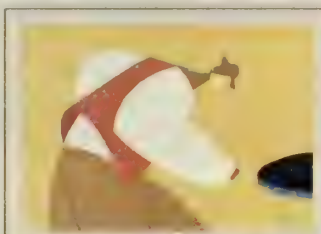
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Up Front

EDITED BY ROBERT McNATT



MISHAPS: 19 GIs have died so far this year

PENTAGON PROBLEMS

PREVENTING TRAGEDY IN THE SKY

U.S. ARMY HELICOPTERS ARE apparently not all they can be. The Navy is buying ground collision-avoidance systems for its copters, and the Air Force will follow suit. At the Army, however, only Apache attack gunships—25% of its fleet of 3,000 advanced choppers—will have high-tech protection. Army Blackhawks and Chinook transports and Kiowa Warrior scouts will continue using older radar.

In the 11 months ended Sept. 1, 19 GIs have been

killed in mishaps where there has been no mechanical failure or pilot loss of control. The radar used now only tells a pilot's present position, not what territory is approaching. An Army study of accidents from 1988 through 1997 says that warning systems could have halved the 103 fatalities and \$428.5 million in damages.

The Army says it can't afford the equipment. But Cubic Defense Systems, a maker of the gear, claims that Army figures are outdated. The price over a decade for new hardware has fallen from the \$100,000-per-aircraft Army estimate to \$50,000. That would total about \$110 million for the non-Apache fleet, or 25% of the monetary losses over the past decade. And many lives would presumably be saved. *Stan Crock*

GRAPE EXPECTATIONS

IS THIS WINE A SAGITTARIUS?

SOME OF FRANCE'S leading vintners are looking to the stars for inspiration in making a better bottle of vin. Yep, a dollop of astrology, some New Age lingo, and a little environmental planning are helping some top French winemakers.

How so? First, some vineyards are fertilized with cow manure and water mixed into what is called a "vortex" that contains "life forces." Later, the winemakers harvest and bottle according to astrological charts. "Our aim is to return to making wine like our ancestors," says Anne-Claude



Leflaive, director of Domaine Leflaive in Burgundy. You may think it's all hocus pocus, but admired vintners such as the Loire Valley's Nicholas Joly, and the Rhone Valley's Michel Chapoutier have adopted the star-gazing techniques. Their wines have excelled in critical tastings.

The stargazers are also ecologically aware. "The goal is respect the land and make the wine faithful to its earth," says Chapoutier. Indeed, many of these winemakers also limit grape yields and the use of synthetic pesticides. Bottling by the phases of the moon may not yet be standard practice, but earth-friendly growing is gaining acceptance. *William Echikson*

TALK SHOW "We'll have to make judgments about what constitutes a satisfactory accounting for the use of past funds."

—Treasury Secretary Lawrence Summers, who said further U. S. support of IMF credits for Russia is in doubt

POLLUTION SOLUTION

WASHINGTON'S SULFUROUS FEUD

WHEN PRESIDENT CLINTON announced a sweeping plan to cut air pollution by, among other things, reducing sulfur content in gasoline, the reaction was predictable. Auto makers and oil refiners complained to the Environmental Protection Agency, headed by Carol M. Browner. But what's this? The Administration's own Energy Dept. is also opposing the President's plan.



Energy, headed by Bill Richardson, has submitted a harsh 11-page analysis that objects to the EPA's May 1 proposal for low-sulfur gas. Quietly filed on July 13 as

part of a routine public comment period, Energy's letter asserts that the technology for making low-sulfur gas is unproven and that efforts to mandate it could lead to shortages.

One EPA official dismisses Energy's qualms as a mere technical matter that would undermine the Administration's clean-air goals. But others are worried. "To find a cabinet agency raising stru-

vous objections is very surprising," says Frances O'Donnell, executive director of the Clean Air Trust, an advocacy group. The EPA says

it wants the issue settled before December. Otherwise Congress may step in to settle the bureaucratic bickering. *Lorraine Woelke*

CLASS NOTES

SLOAN'S ONLINE ORIENTATION

WHEN THE SLOAN SCHOOL OF Management at MIT required candidates for the class of 2001 to apply electronically, they were just trying to streamline the process. They got more than they bargained for.

Some of the lucky 15% who got in formed a twice-weekly online chat room before arriving on campus on Aug. 30. Eventually, about 300 incoming students—75% of the class—joined in to find friends, roommates, and teammates for school projects. Some even managed to hook up with like-minded entrepreneurs to pursue business plans.

As a result of the commu-

nity-building, Sloan scrapped part of its weeklong orientation for new students next year. "It's too early to tell whether it has changed the nature of the class, but certainly has moved the timetable forward," says Roberto Garcia, Sloan's Director of Admissions.

All has not been sweetness and virtual light, however, for the class of 2000 apparently the first required by a B-school to apply online. The admissions office computer



crashed the night before the E-applications were due. Sloan, says a sheepish Garcia, made allowances for the late filings. *Paul C. Judge*



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Up Front

THE I-WAY PATROL

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AFTER SHAKING UP THE BUSINESS world, the Internet is doing the same to its academic wing. This fall, several topflight B-schools will offer formal E-commerce majors.

And at least two schools will begin offering an E-commerce Master's degree.

Among those starting majors is MIT's Sloan School of Management. It joins Vanderbilt, the University of Maryland, and others. Carnegie Mellon and Creighton University are two schools known to be instituting E-commerce Master's programs.

What's the point? The growing demand for Net-savvy managers, says Charles



Hickman, director of member relations for the AACSB-International Association for Management Education, which accredits business schools. B-schools have offered individual courses in E-marketing or Web technology for several years. But now they're seeing intense interest in concentrated, formal programs

from companies and students alike. "This is something that schools are rushing into as fast as they can," Hickman says. Indeed, MIT reports that companies are clamoring to participate in a spring semester course where students will provide free E-consulting. Says Nader Tavassoli, who is director of MIT's E-commerce and marketing major: "I'm beating them off with sticks." *Anne Tergesen*

MILLENNIAL MADNESS

Y2K TERROR: THE LIGHTER SIDE

Y2K SURVIVALISTS, BOMB-shelter biscuits, and generator-hoarding, okay. But Y2K haiku? Just when you thought we didn't need another Y2K Web site, along comes y2kculture.com.

That's culture with a smile. Founder Declan McCullagh, 27, a tech writer for *Wired* News in Washington, says his non-commerce site explores the premise that concern about Y2K is more than a passing fad; it's a genre. Log on, he'll invite you, to a place where "Veteran survivalists share water purification tips with skittish congressional staffers. And

get-rich-quick scam artists have found fertile soil for seeds of doubt and despair."

Not sarcastic enough for you? Check out the site's look at teen heartthrob Britney Spears' Millennium Eve plans (partying with Mom and friends). Review its Y2K alphabet ("A is for Anthrax"). Or read Chip 'n Little (à la Chicken Little), a weekly cartoon strip that tracks hero

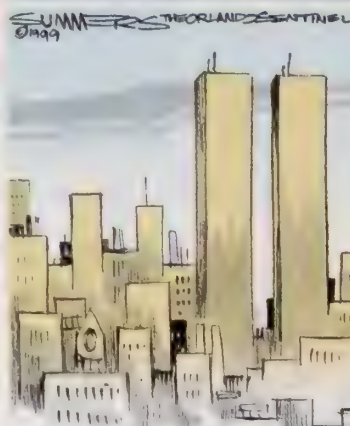
Chip's struggle to grasp The Impact Of The Bug On Life As We Know It. Or the article that tells what Y2K has in common with "Mad Cow culture" (everything). Says McCullagh: "It's not every day that the towering edifice of modern civilization is revealed to be perched on the edge of a tottering precipice." Dude, you got that right.

BRITNEY: AT HOME

Marcia Stepanek



DRAWN & QUARTERED



ECO TRENDS

FLORIDA IS HIT BY A MILLION 'EEKS'

CATS, TRAPS, AND POISON can't stop the field mice and rats that have swarmed across Apopka, Fla., near Orlando, since last January's draining of polluted Lake Apopka. The vermin are so bad that one man collects 150 a day for his pet boa. The county airport reports mice eating phone lines and nesting in its small aircraft.

And in an area that bills itself as "the indoor foliage capital of the world"—with 500 nurseries supporting a \$178 million local industry—businesses say the damage has been extensive to their flowers and houseplants.

Officials haven't yet put a dollar figure on that damage. But at least a quarter of the nurseries have been hard-hit.

"They are eating my seed, don't know what to do," John Sincavage, owner of Crooker's Nursery. And Linda Jonas, v-j Gro Supply clerk: "You hear ladies screaming all the time." Local authorities are getting 30 calls a day, but no solutions. "Nothing



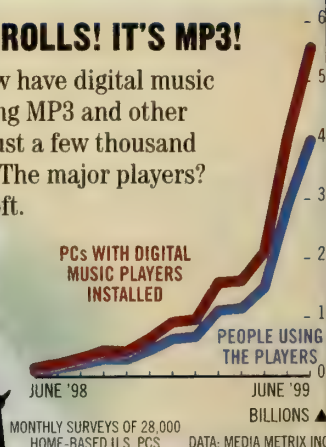
EATING EVEN PHONE LINE

this has happened in Florida," says University of Central Florida biologist J. Stout. Nature might come to the rescue: More snakes, birds, and hawks have been showing up to devour pesky critters. *Dennis Blair*

THE BIG PICTURE

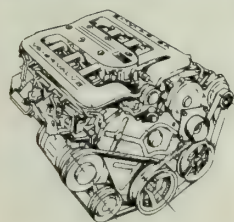
IT ROCKS! IT ROLLS! IT'S MP3!

Some 5½ million PCs now have digital music players installed, including MP3 and other formats. That's up from just a few thousand PCs less than a year ago. The major players? RealNetworks and NullSoft.



FOOTNOTES Bottles of champagne ordered for the U.S. Open: **7,200**; pounds of shrimp: **8,000**; pounds of hot dogs: **45,000**

**Sometimes you forget the milk.
Sometimes you forget the bread.
Sometimes you forget the store altogether.**



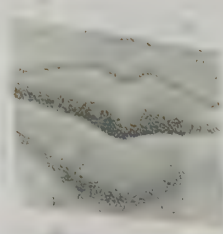
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21ST CENTURY IDEAS: THE GOOD, THE DANGEROUS, THE UNMENTIONED

All of the "21 Ideas for the 21st Century" (Cover Story, Aug. 30) are interesting and imaginative—but also dangerous extrapolations into the murky future. The past century has brought technological changes of enormous and unprecedented proportions into our lives. The pace of development is ever-increasing, and will certainly continue to accelerate as we make the transition into the next century. Most of your predictions, in fact, assume that as a given.

Yet therein lies the rub. The changes we have experienced so far have in many ways benefited mankind. Medical advances come to mind as an obvious example. Many innovations, however, are of a decidedly two-edged nature: Automobiles have increased our per-

sonal freedom but have also turned us into a nation of overweight, out-of-shape candidates for premature diabetes, heart disease, and other unpleasant afflictions. Our communities have been turned into a collection of strip malls and parking lots. Our children are deprived of the exercise they need because we drive them everywhere. Our sense of civility has become a victim of road rage.

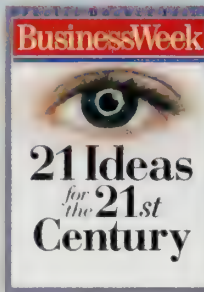
Television, and more recently computers, have greatly expanded our access to information, but rather than having an ennobling effect, too many of us have become couch potatoes addicted to the laugh track of banal sitcoms or the questionable allures of porno sites.

The key issue is that, while technology heaps new capabilities on us at a breakneck pace, we have in many ways remained moral and ethical pygmies, unable to deal effectively and responsibly with this cornucopia of technical wizardry. This issue must be addressed and resolved as part of the agenda for the immediate future, or we risk becoming a society that spins out of con-

trol from a sheer incapacity for absorbing an ever-increasing rate of change.

Paul W. Rosenbush
 Manhattan Beach, CA

The rise in nationalism and separatism goes much beyond the Internet and globalization. Much of it is caused by the demonization of central government by conservatives and the resulting abdication of responsibility to state provinces, etc. When differences in opinions, ethnicities, or economic strength become territorial, separatism raises its head. You mention New York City, but the U.S. is not immune: As shown by the elections of 1996 and 1998, there already is a huge ideological gulf between the Northeast, the northern Middle West, and the Pacific Coast on the one hand, and the Southeast, the Deep South, and the Mountain States on the



TECHNICAL OVERLOAD?

"We have in many ways remained moral and ethical pygmies, unable to deal effectively and responsibly with this cornucopia of technical wizardry."

other. The latter group now runs Congress and seeks to impose its agenda on the rest of us. Not that separatism is clear and present danger so far. But one thing that the world does not need is a neo-Confederacy that would make apartheid-era South Africa look like Sweden.

John E. Ullmar
 Professor Emeritus of Management
 Hofstra University
 Hempstead, N.Y.

Thank you for the monumentally stupid cover story. You first express disbelief for prediction, projection, and extrapolation, yet then engage in same for 8 pages. You start from the (correct) premise that scenario planning is a use-

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RECTIONS & CLARIFICATIONS

the hottest property in the valley?" (People, Aug. 30) referred inaccurately to certain scholarships at the University of North Carolina at Chapel Hill. Named after John Morehead, they are called the Morehead Scholarships.

...ideas for the 21st Century" (Special Double Issue, Aug. 30) mentioned that the drug finasteride is used to treat and prevent prostate cancer. In fact, the Merck & Co. drug has been officially approved by the Food & Drug Administration only to treat benign prostatic hyperplasia and male-pattern baldness.

...the last word in the new words" (Up Front, Aug. 30) should have referred to a punk designer as Vivienne Westwood, not Vivian.

...tool in creating the flexibility, adaptability, and responsiveness necessary for uncertain future, but then go off on speculative tangents untethered to basic realities of economics, human nature, or common sense.

Personal turbines? A 2,000-member N.Y.C. Leaderless corporations? Virtual portation? Great fun, perhaps, but in the end, useless for informing business planning today. I have made a fine living as a professional trends analyst and business futurist over the past 20 years punking such drivel for my clients, subscribers, and seminar audiences, and obviously I can look forward to doing the same for the next 20 years as well. By all means, renew my subscription.

Roger Selbert
Editor & Publisher
Growth Strategies
Santa Monica, Calif.

Although your issue was thought-provoking and interesting, you missed two of the big problems that will confront our offspring during the coming century: (1) Continuing growth of population, not only in the Third World, and the spillover into the possibly shrinking industrialized countries.

(2) Industrial and agricultural demand for water by a growing population, and climatic fluctuations in the distribution of precipitation. The engineering, environmental, economic, and political implications for managing our hydrological resources are only beginning to be addressed. Water-resource management will require a massive effort.

I encourage you to consider presenting articles on these topics; they will be hot potatoes.

James Weinman
Vienna, Va.

AN UNFAIR POKE AT MUTUAL FUNDS?

It is useful to remind mutual-fund shareholders to consider fees in their decision-making process, ("High fund fees have got to go," Business Week Investor, Aug. 16). That helps promote financial literacy and investor awareness. But by advancing flawed arguments to support this reminder, Robert Barker does just the opposite.

Contrary to the implication left by

the Barker Portfolio, the total cost of purchasing equity mutual fund has declined by 34% since 1980. As of last year, 77% of equity fund shareholder accounts were in funds that charged less than the average expense ratio for all equity funds. Regrettably, the article ignored this important information. Moreover, most mutual funds are less expensive than bank, insurance, and other financial products.

The article's most fundamental error was to assume that industrywide



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Readers Report

growth should lead to industrywide economies of scale. But economies of scale do not occur industrywide; they occur fund by fund. For example, if the industry grows solely because of the entry of many new funds, virtually no economies of scale would be realized.

Finally, the comments about independent directors at mutual funds are not just wrong, but insulting. Mutual funds have for 60 years successfully avoided major scandal, a record without peer in the world of financial services. Independent directors have contributed significantly to this achievement.

Matthew P. Fink
President
Investment Company Institute
Washington

STAYING OUT OF A FAMILY SQUABBLE

I would like to clarify Mills Corp.'s position on the proposed stadium project with the San Francisco 49ers ("Not exactly what you'd call a weak sister," Sports Business, Aug. 16). It does not appropriately reference Mills Corp.'s role in the dispute between Edward J. DeBartolo Jr. and his sister, Denise DeBartolo-York. Mills negotiated with Edward on developing the stadium mall, because he was the recognized owner of the team at the time. Mills was not a player in the family's argument over "self-dealing." The feud and the lawsuit is between the siblings; Mills is not a party to either. It is improperly suggested that Mills declined comment on charges by the sister of Edward's "lavish lifestyle." Instead, we declined comment on the legal dealings between the two.

Mark J. Rivers
Executive Vice-President
Mills Corp.
Arlington, Va.

MIXED REVIEWS FOR MIXING PROFESSIONS

Bravo to Jeffrey Garten for highlighting the folly of merging the disparate professional practices of law and public accounting with one another and with other consulting enterprises ("Ethics be damned, let's merge," Economic Viewpoint, Aug. 30). Indeed, Garten's succinct analysis just begins to outline this disaster in the making.

The ultracompetitive nature and lightning pace of the modern business world is preventing otherwise thoughtful businesses from seeing the essential reasons why such professional practices

have historically been kept separate, and for good reason. The public accounting profession on the one hand has a higher responsibility to the public and the investment markets at large. Its independence is priceless, and has been a cornerstone of the transparency of our capital markets since the Depression. Even chipping away at it today will irrevocably lead to the collapse of the whole structure, with consequences too gruesome to imagine.

Similarly, the legal profession relies upon the sanctity of such principles as attorney-client privilege, the protection of attorney work product and mental thought processes, and the duty (indeed, the right) to represent one's client zealously. Blurring the distinctions between attorneys and non-attorneys, let alone permitting them to practice together, will destroy all of that, to the ultimate detriment of business itself.

The fact that certain shortsighted members of the business community demand "one-stop shopping" is insufficient reason to endanger the whole system.

Anthony Michael Sabino
Professor of Law
College of Business Administration
St. John's University
Jamaica, N. Y.

Jeffrey Garten's column demonizing multidisciplinary practices fails to take into account the everyday consumers who stand to benefit from new American Bar Assn. rules allowing accountants and lawyers to provide collaborative, "one-stop-shopping" alternatives.

The ABA has a rare opportunity to make ordinary people's lives easier. Just think about buying a home—in many states you need a real estate agent, a lawyer, an appraiser, a title searcher, a mortgage lender, and an insurance agent. It's a time-consuming, expensive, and frustrating process. Imagine how much easier it would be if you could get all these services in one place.

It's hard to argue that such an arrangement does not make good business sense. I am confident rules could be written that protect consumers and corporations from inappropriate practices without compromising the principles central to the legal profession. Professional service firms must evolve to meet the changing needs of their clients. To do otherwise is to ignore that we live in a world of change.

Lora H. Weber
President and Executive Director
Consumers Alliance
of the Southeast
Texas

ANN LIVERMORE AND GENDER BIAS

Ann Livermore ("The hottest property in the Valley?" People, Aug. 14) was in poor taste. What an example of gender bias! Like many others, you can't seem to understand how to present a woman's profile. For example, you didn't have a picture of Cher Galvin in a diaper! Ann Livermore is the only baby picture in the issue.

Far exceeding even the lowest standards of politically incorrect was the outrageous comparison of wardrobes to Carleton S. Fiorina! You didn't comment on Boris Yeltsin's wardrobe. How could you stoop so low as to use "p. Jane"? Why didn't you comment on her ability to network? Apparently, it contributed more to her advancement than her "premature gray hair." Did it ever occur to you that Ann Livermore's flight up in Hewlett-Packard was propelled by her ability to fit into the picture and be just "one of the executives" because she doesn't see gender at work?

Michele Haug
Riegelsville, Pa.

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Leadership Lessons and Turnaround Tactics of IBM's Lou Gerstner
 By Robert Slater
 McGraw-Hill • 309pp • \$24.95

WITHOUT GERSTNER, HIS STORY GOES UNTOLD

You have to feel just a little sorry for Doug Garr and Robert Slater. Both have written accounts of one of the most closely watched business stories of this decade: the selection of Louis V. Gerstner Jr. to lead the turnaround of computer giant IBM and progress thereafter. But both authors lacked the cooperation of the star of this story—Gerstner—and partly as a result, both *IBM Redux* and *Saving Big Blue* fall back on guesswork, analysis, anecdote, and tiresome parades of press clips. Even more telling, both authors have missed the essence of Gerstner's work: the transformation of IBM from a computer company to a technology and services company in which the Internet plays a key role.

In *IBM Redux*, Garr attempts to tell the story of how Big Blue fought its way out of the "death spiral" that it was in before Gerstner took the helm in April, 1993. The IBM of today stands in stark contrast to the company that Gerstner, as he likes to say, "parachuted" into—an IBM that had racked up some \$16 billion in losses over three years. IBM's stock, which sunk to the low 40s in 1993, has split twice and is now trading around 123. Profits are back, and after years of sluggish growth, revenue for the first half of 1999 is growing at double-digit rates. Along the way, Gerstner made the tough calls, including massive layoffs (he has since hired more than he cut), the sale of a few operations, and the uttering of several manufacturing plants, projects, and offices.

Garr's book had the potential to be a wonderful insider's account, since Garr worked as a speechwriter for IBM from March, 1996, until the end of 1997. But he wasn't able to get the cooperation of Gerstner or that of any other senior IBM executive. (According to Garr, Gerstner

told colleagues that they could decide for themselves whether or not to cooperate. No one did.) The author did spend lots of time interviewing former Chief Financial Officer Jerome B. York and correctly gives him a lot of credit for the company's financial turnaround. But ultimately, York gets so many kudos that readers may wonder why the board didn't kick Gerstner out and just make York chairman. York, says the author, slaved to save IBM's PC business, even sacrificing weekends. G. Richard Thoman, the close Gerstner confidant who was running the business at the time (and who is now CEO of Xerox Corp.), is unfairly portrayed as inept. Nor does Garr dwell on the ex-CFO's shortcomings, perhaps because York was such an important source. York, for example, didn't believe IBM should invest in the low-margin disk-drive business. Today, it's one of the company's hottest money makers.

Moreover, *IBM Redux* spends far too much time on much-discussed IBM endeavors and well-reported events. For example, Garr devotes many pages to recounting the hostile acquisition of Lotus Development Corp. in 1995 and IBM's fumbling of its PC business—both stories that have received tons of ink.

There are some redeeming qualities. Garr does a competent job recounting the Gerstner years, adding a few fresh details. There is a nice account of the creation of IBM's ad campaign and how Gerstner, with the help of Abby Kohnstamm, IBM's top marketing executive and longtime Gerstner compatriot, crafted a hip new image for IBM linked to the Internet. Garr also has a delicious

anecdote dating from Gerstner's years at American Express Co.: From that company's headquarters in New York, he often gave his former McKinsey & Co. mentor, J. McLain "Mac" Stewart, who worked at McKinsey offices nearby, rides home. During these, they would discuss work the consulting firm was doing for the financial-services giant. But Gerstner, who lives in Connecticut, never drove Stewart directly to his Manhattan apartment building. Instead, Gerstner's driver dropped Stewart just off the highway exit, nine blocks away, so as not to waste Gerstner's time.

But Garr skims over some important moves by Gerstner—most noticeably, those involving the Internet. In the opening chapter, *IBM Redux* recounts a key speech that Gerstner delivered at the 1995 Comdex computer show. This is the industry's largest gathering of techies, and it was Gerstner's first speech before his new peers. Gerstner used the occasion to insist that the In-

ternet was a business opportunity—much more than a place for consumers to browse for content. But the author doesn't follow through later in the book, where he should have noted how Gerstner made the Internet key to IBM's turnaround and its future success.

Is Gerstner "one of America's most creative business leaders or just an extremely good manager?"

This question, raised toward the end of *IBM Redux*, is a good one. Unfortunately, we're still waiting for the answers.

In *Saving Big Blue*, author Robert Slater tries to distill the essence of Gerstner's skills into a management book. It's a formula that Slater has applied before, to General Electric Co.'s Jack Welch. Unfortunately, it is the reader who needs to be saved. Slater's request for an interview with Gerstner was also denied, and his 300-page book is no more than a thinly veiled clip job. He leans heavily on accounts drawn from many business publications, including business week (and many by this writer). Slater credits his sources, but it's disconcerting to read reconstructions of one's old stories with every



IBM'S SUCCESSFUL EXPLOITATION OF THE INTERNET IS BADLY NEGLECTED

anecdote in place. At the least, Slater could have freshened up some of the material. He repeats a tale about Gerstner helping form a consortium of banks to take advantage of the Internet. The company formed out of that effort, Integration Financial Network, has had a rocky start and hasn't lived up to its promise. But the reader won't learn that, because Slater didn't include any updates.

The book is also padded and repetitive. The same material appears in several places: On page 67 and again on page 113, we're given the much-cited Gerstner quote on how the last thing IBM needs is a vision. Several chapters examine IBM's culture, using similar material or discussing the same events from slightly different points of view.

Alas, Slater doesn't come close to providing lessons from Gerstner's turnaround. Many chapters simply sum up an old event—using press clips from the time—and then provide a final paragraph elucidating what has just been described. This is in-depth analysis?

Elsewhere, Slater attempts to get inside Gerstner's mind by quoting lengthy sections of the CEO's speeches. Readers would be best advised to skip Slater's book and head straight to IBM's Web site, where the entire text of several lectures is available.



Unfortunately both Garr and Slater have missed the essence of IBM's turnaround. Yes, Gerstner stopped the financial bleeding and re-energized the corporation's culture. But the authors haven't given the reader a solid view of IBM today. Gerstner's IBM is no longer a computer company—it's a technology and services company. Sure, IBM is selling plenty of computers. But the company's real growth is coming from two other businesses: selling such technology as microchips and disk drives to other high-tech companies and providing services to large corporations that do not want to set up or run their own computer operations. Gerstner saw the potential of these businesses and began pushing a sluggish IBM to take advantage of them.

More important still has been Gerstner's ability to recognize the Internet's strategic importance to IBM. In fact, the story of Gerstner's turnaround could aptly be entitled *How the Internet Saved IBM*. As the leading provider of general high-tech services, Gerstner positioning IBM to be the first company that major corporations come to for the knowhow to put their businesses on the Web. So far, it's working. IBM's Internet services unit is a \$3 billion operation growing at 40% a year.

Sadly, Garr and Slater are stuck writing about the old IBM. And when the authors do discuss the Internet, they mostly talk about IBM's efforts to market a network computer, a stripped-down desktop machine that was over-hyped by the computer industry as a PC-killer. That product is a minor footnote in IBM's Internet strategy.

In short, these books leave much to be desired. But both faced serious obstacles from the start: IBM's turnaround isn't completed, and its story won't be revealed until Gerstner decides to tell it—or write his own account.

BY IRA SAGER

Associate Editor Sager has followed IBM for two decades.

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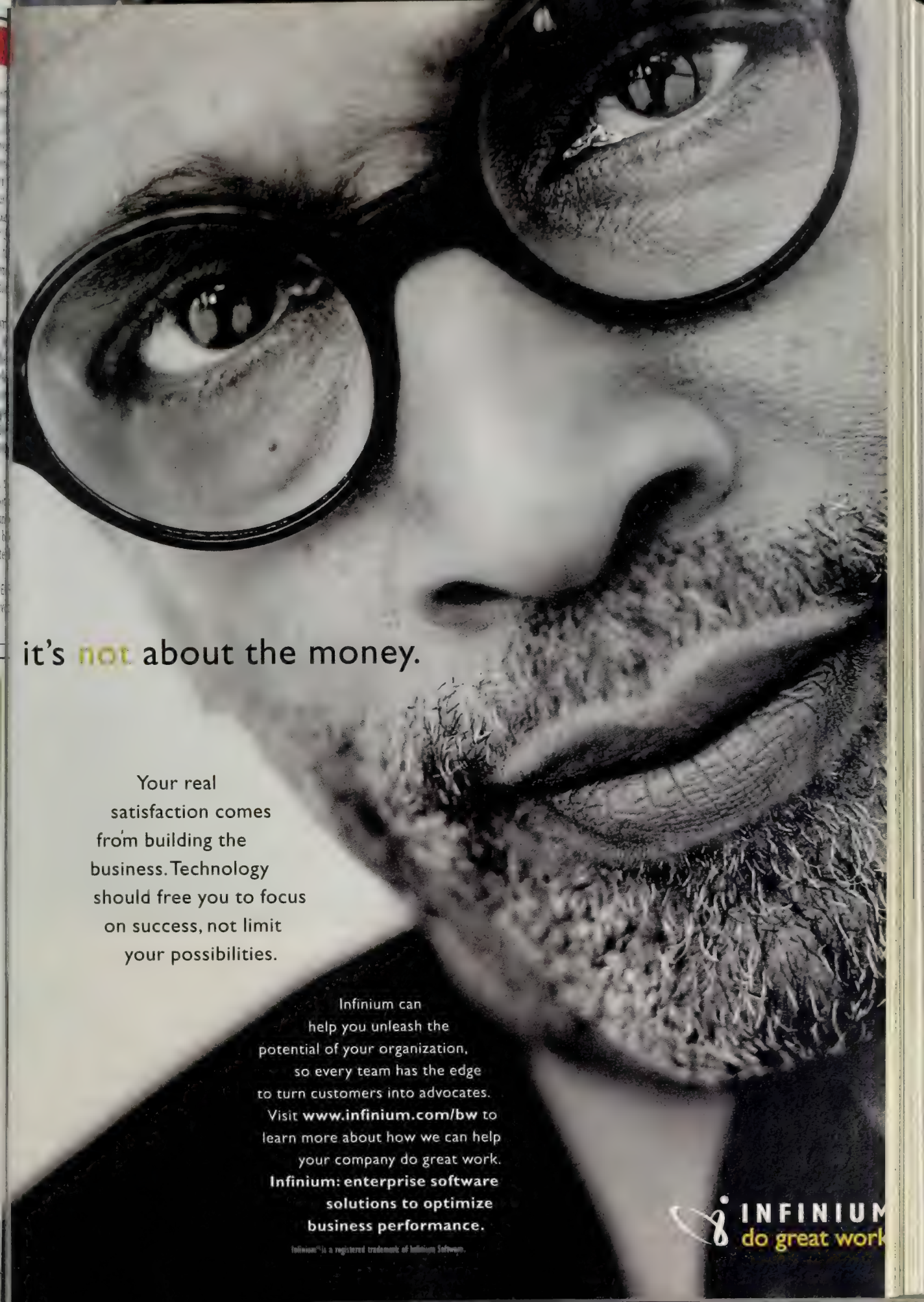
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BY STEPHEN H. WILDSTROM

THE HIGH COST OF 'FREE' PCs

The strings attached often kill the benefits. But a few deals are worth checking out

There's no such thing as a free PC. This should not come as a surprise to the worldly readers of BUSINESS WEEK. But judging from the current flood of offers for free or deeply discounted computers, you might think that the laws of economics and common sense have been repealed.

In fact, all of these deals come with significant strings attached and require close examination. Some are simply losers. Others can provide substantial savings, but only for the right customers.

The offers come in two categories. In one type, con-

sumers get a free computer, along with free Internet access, but have to accept a constant stream of advertising on the screen. In category two, the customer gets a free or deeply discounted PC in exchange for a long-term contract for paid Internet service.

TAILOR-MADE. Free-PC of Pasadena, Calif., offers the best-known of the free deals. If you qualify after filling out a rather nosy questionnaire about your education, income, and lifestyle, you get a free PC, typical of a system you could buy for about \$500, with a 15-inch monitor and free Internet access. The catch is that about 40% of the display is covered with a changing stream of ads supposedly tailored to your interests as revealed by your browsing habits. You agree to let Free-PC monitor your activities online and to sell aggregated data on its customers' activities. To me, this deal makes sense only if there's

no other way you could afford a computer. If that is the case, Free-PC probably won't accept you as a customer anyway. Nonetheless, Free-PC reports plenty of takers. And a startup called FreeMAC.com plans to give away 10,000 Ap-

ple iMacs in a similar deal.

I think most people will be a lot happier with deals built on the model of the cell-phone business, where the carrier subsidizes the cost of the equipment in exchange for your agreement to buy service for a period of time. Here, it's Internet service providers who are subsidizing computer purchases.

Some of these deals are a bit funky. For example, a company called Online Amigo.com (www.online-amigo.com) offers a free PC if you subscribe to two years of Flash-Net Communications

service at \$21.95 per month. The problem is that you get a refurbished, creaky 75 MHz Pentium, a computer best suited for use as a doorstep.

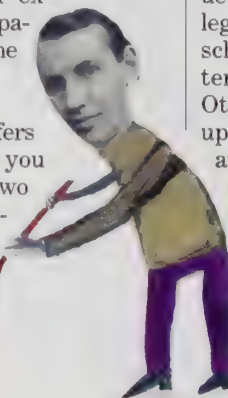
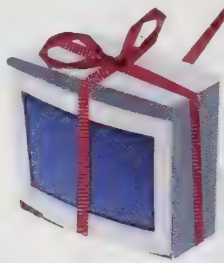
The offers I find most appealing come from America Online's CompuServe unit, Microsoft Networks, and Prodigy Internet, in cooperation with various retailers and computer makers. They all work more or less the same way. You sign up for three years of Internet service for between \$19.95 and \$21.95 a month and get a \$400 credit or rebate toward the purchase of a new computer. Participating computer makers include Compaq Computer, Hewlett-Packard, IBM, and eMachines. In late August, Office Depot, for example, was offering an eMachines eTower 400i with a 14-inch monitor and either a printer or a scanner for \$149, after rebates. Add \$21.95 a

month for a three-year CompuServe subscription. Best Buy advertised a more capable IBM Aptiva for \$299, after rebates, with a three-year Prodigy subscription price at \$19.95 a month.

These are attractive deals, but the up-front commitment to \$700 or more worth of Internet service means they are not for everyone. One group that will find little value in the arrangement is college students, since nearly all schools provide free, and often high-speed, Net access. Others who could well end up losing from these deals are the lightest and heaviest users of the Internet. People who only want Internet access to read E-mail and do a little light Web browsing would likely do better just buying an inexpensive computer and signing up for a \$10-a-month limited-access account with a service provider.

People who use the Internet a lot may also be poor candidates. That's because three years is a long commitment at a time when Internet access technology is changing rapidly. Heavy users are likely to be the earliest adopters of high-speed cable or digital subscriber line service as it becomes available in their areas. There's also a chance that the cost of Internet access could fall dramatically, meaning that the price of a cheap PC is expensive Internet access.

It's by no means clear that the cell phone-style subsidies will become the model for the computer market. Dell Computer and Gateway, for example, are going the other way, bundling free or reduced-price Internet service with computer purchases. While the market sorts itself out, there's the potential for some good consumer deals. But before jumping, assess your present and future needs carefully—and read the fine print.



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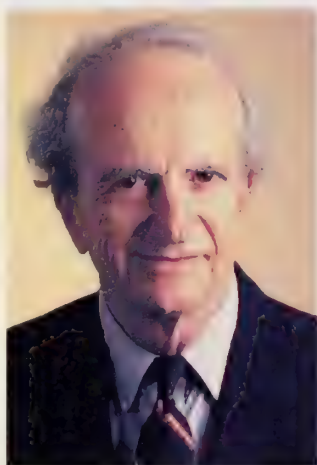
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BY GARY S. BECKER

ESTATE TAXES: AN IDEA WHOSE TIME HAS GONE



A LEG UP:
Rather
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inheritances,
let's guarantee
a good
education for
all. That's
the best way
to level the
playing field

Gary S. Becker, the 1992 Nobel laureate, teaches at the University of Chicago and is a Fellow of the Hoover Institution.

A tax on estates had merit in earlier times as a leveler of the playing field for children from middle-class and poor families. But children in modern, knowledge-based economies "inherit" the economic position of their parents primarily through the transmission of human capital. Tangible wealth plays a decreasing role. Since the important public-policy role of estate taxes has passed, it is time to eliminate the tax.

Inheritances are a significant source of inequality in traditional agricultural societies because land and farms get passed from parents to children. However, property and other assets have become a much less important source of children's wealth since education, training, and other human capital comprise about three-quarters of total wealth.

Children of better-educated and higher-earning parents receive more education and training than their peers, and they generally grow up in more stable home environments where they are taught to develop their talents. Some of the greater abilities of successful parents also are transmitted to their children. For these and other reasons, children from successful families have many advantages, and so tend to get better jobs and have higher earnings.

Of course, individual cases often deviate greatly from these tendencies, and some children of highly successful parents do quite badly, while others born in poorer families rise to great success. Still, the average degree of persistence in earnings between parents and children is reasonably strong in America and other developed nations, and it is even stronger in most poorer countries.

HEAD START. The transmission of human capital within families is the major source of inequality of opportunity. Thus, the best way to reduce this inequality is through improving the human capital of children in less advantaged homes. Among the effective policies that could be implemented are publicly funded school vouchers to children in families that are not rich and head-start programs for poorer children. It also would help to reform marriage law and taxes on married couples so as to encourage parents of young children to stay together rather than split up.

Some defenders of the U.S. estate tax believe that it causes only minor inconveniences and that this tax brings in a lot of revenue. However, the tax rates are quite high: After

an individual exemption of a little over \$600,000, the rate quickly rises above 50% and then jumps again to exceed 50% of taxable estates. These high rates encourage families with assets to seek expensive legal and accounting help and find convoluted ways to reduce their tax burden.

Trust and estate law is the specialty of most 20,000 lawyers in America, who, along with many tax accountants, spend their high-priced time searching for loopholes to avoid these tax rates. The loopholes include gifts to children and spouses, generation-skipping trusts, life insurance trusts, and charitable trusts. As a result of these and other devices, the estate tax, despite high nominal rates, produces only a little more than 1% of total federal tax receipts. Due to the many (often costly) ways to avoid this tax, only about 1% of adults who die leave taxable estates, and many of the very wealthy pay negligible taxes.

SMALL GAIN. Families with small businesses sometimes also succeed in finding loopholes, but frequently they are forced to sell control upon the death of the principal owner in order to pay the estate taxes that are due. This is why farmers and others who own their own business are the most powerful interest group behind the growing opposition to this tax.

These harmful effects of the estate tax may explain why many countries have much lower estate taxes than the U.S. and why a few, including Canada and Switzerland, do not even tax bequests to close family members, although they may impose capital-gain taxes when assets are transferred to children. The overall tax-reform package recently passed by Congress does phase out the U.S. estate tax during the coming decade. However, this is unlikely to become law since President Clinton is likely to veto any bill that eliminates the estate tax entirely.

Public policy ought to more fully recognize that incomes and occupations in the coming century will depend primarily on knowledge and skills. Equality of opportunity for children in poorer and middle-class families can be most effectively advanced by improving their access to high-quality education and training and through improving their learning at a very early age. Estate taxation has lost its purpose, and it can be abolished with little effect either on equality of opportunity or on tax revenue.

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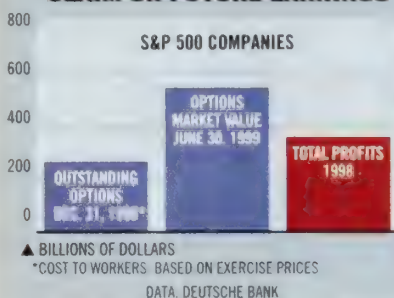
BY GENE KORETZ

AN OVERLOOKED LABOR COST

Options: Way more than just a perk

Up to now, the big story about stock options has been how they have created a lot of fat cats in upper-management ranks—helping to push annual pay of CEOs of large public companies up 442% in the 1990s, to an average \$10.6 million last year (BW—Apr. 19). But while the soaring options of top brass have made headlines, economist Joseph Carson of Deutsche Bank thinks the real news about options may be the way they are affecting key economic statistics—and thus possibly distorting

STOCK OPTIONS' BIG CLAIM ON FUTURE EARNINGS



the views of policymakers and investors.

"Options," says Carson, "represent a significantly greater potential income gain for workers, and cost to companies, than many people think."

As evidence, he cites a Deutsche Bank study of the companies in the Standard & Poor's 500-stock index. The study finds that 99% grant stock options to employees. It also calculates that, based on exercise prices, the aggregate potential cost to employees of all outstanding options of S&P 500 companies at the end of 1998 was \$265.7 billion.

The critical number, however, is the market value of unexercised options as share prices rise. Deutsche Bank researchers estimate that this stood at \$543.5 billion at the end of June. That translates into a net gain of \$278 billion over the cost of exercising those options—an amount equal to 78% of total 1998 profits of all S&P 500 companies.

The catch for investors is that options aren't treated as expenses in income statements until they are exercised. And that has an impact on market perceptions in two ways.

First, it tends to inflate reported earnings. At a late-August central bank conference in Jackson Hole, Wyo., Federal Reserve Chairman Alan Greenspan estimated that not recognizing the cost of options when they're granted (and when their exercise prices are lowered) has pushed up the annual growth rates of reported profits by one or two percentage points over the past five years.

Second, the growing value of outstanding stock options over their exercise prices represents a potential cost for companies. At some future point, observes Carson, "that expense will weigh on company earnings."

The flip side of this picture, of course, is that options are a form of compensation. And while they're hardly spread equally or widely, that's less true than in the past. Consultancy William M. Mercer Inc. reports that nearly 40% of large U.S. companies now have option plans for at least half their employees. Carson calculates that the market value of unexercised options as of June 30 equates to a \$17,000 gain per S&P 500 worker.

The growing use of stock options, he notes, implies that pay gains may be understated. And it's likely that recipients regard their rising value as another form of savings and potential income—adding fuel to consumption and helping to drag down the official savings rate.

"Options are no longer simply perks for a few top executives," he says. "Their increasing size and breadth are making policymakers in Washington sit up and take notice."

A WOMAN'S PLACE IS ...

Men frown on female execs abroad

American women seeking to climb the corporate ladder via overseas positions face steep odds. While females account for some 30% of students in MBA programs, they're only 14% of those chosen by Corporate America for foreign postings. And a big reason, suggest two studies presented at the Academy of Management's annual meeting in Chicago last month, is that their male bosses overestimate the problems awaiting them overseas.

In the first study, researchers from Loyola University in Chicago surveyed 261 women who worked abroad and 78 of their mostly male supervisors in multinational corporations. They found that the women saw both their ability to adapt to foreign cultures and the at-

titudes of foreigners toward female pats more favorably than bosses did.

In the second study, researcher Loyola Marymount College in Los Angeles surveyed 323 managers in Germany, Mexico, and the U.S. about their views of the performance of American women working overseas. U.S. managers were significantly more doubtful about American women's effectiveness than were their U.S. female counterparts or German and Mexican managers of either sex.

In sum, U.S. male managers exhibit "unfounded bias" against American women in overseas positions—a bias that researchers believe hampers males' selection for such assignment.

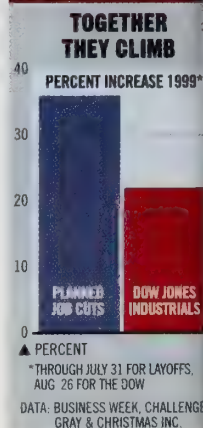
LAYOFFS: A TONIC FOR STOCKS?

To many investors, they're a plus

At last count, job-cut plans by major employers were up 36% from a year ago, while the Dow Jones industrial average in late August had risen 22% since December. A coincidence? While layoffs are bad news for workers who get fired, some people think they have become good news for the stock market because investors now tend to see them as moves to enhance efficiency.

That isn't quite true yet, but things may be moving in that direction, reports Henry S. Farber of Princeton University and Kevin F. Hallock of the University of Illinois. In a study of 3,878 job-cut announcements from 1970 to 1998, the two economists found that the average movement of a company's stock relative to the overall market in the wake of such announcements is still slightly down. But the drop is less marked than in the past, and the share of negative reactions has fallen from 55% in the early 1970s to about 48%.

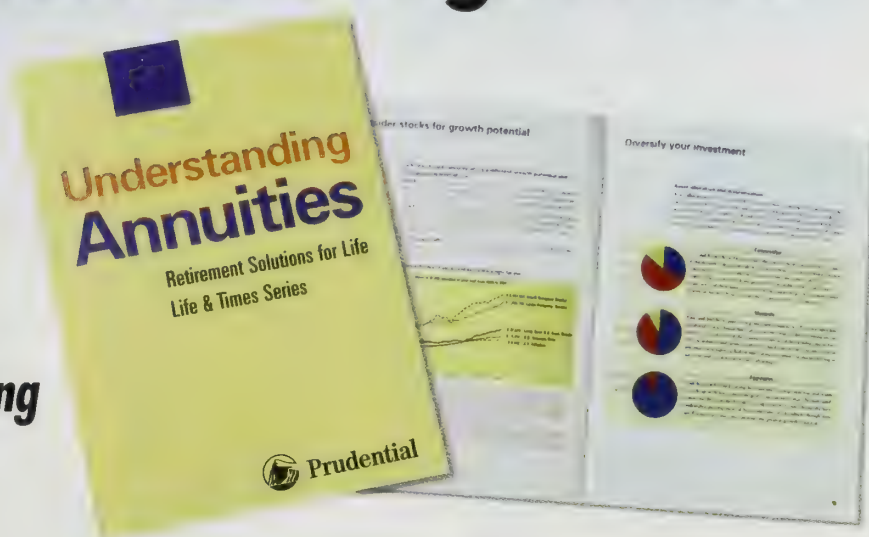
The researchers did find that more job cuts are now attributed to efficiency motives than in the past. But intriguingly, they also found that negative stock market response to layoffs blamed on falling business demand have also lessened over time.



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Founded in 1981, the Beverage Testing Institute conducts tests in a specially designed lab that minimizes external factors and maximizes panelists' concentration. The Institute selects judges based on their expertise, and its tasting and scoring procedures are widely praised as the best in the industry.

Rank	Vodka	Country
96	GREY GOOSE® VODKA	FRANCE
94	Canadian Iceberg Vodka	Canada
93	Stolichnaya Gold Vodka	Russia
92	Staraya Moskva Premium	Russia
91	Van Hoo Vodka	Belgium
91	Stolichnaya Vodka	Russia
90	Tanqueray Sterling Vodka	England
90	Rain 1995 Harvest Vodka	USA
89	Ketel One Vodka	Holland
88	Wyborowa Vodka	Poland
87	Kremlyovskaya Vodka	Russia
86	Finlandia Vodka of Finland	Finland
86	Alps French Vodka	France
85	Sky Vodka	USA
82	Original Polish Vodka	Poland
82	Gambrone Special	USA
82	Finlandia's Polar Vodka	USA
81	Mr. Smirnoff Vodka	USA
80	Pole Star Vodka	Poland
80	Lukusowa Potato Vodka	Poland
80	Absolut Vodka	Sweden
78	Cardinal Vodka	Holland
78	Bartons Vodka	USA
78	Barclay's Vodka	USA
78	Amazon Vodka	Brazil
76	Skol Vodka	USA
74	Smirnoff Vodka	USA
74	Crystal Palace Vodka	USA
74	Belvedere	Poland
72	Schenley	USA
69	Mr. Boston's Rye Vodka	USA

NOTE: THIS RANKING IS BASED ON THE BEVERAGE TESTING INSTITUTE'S 1998 TASTE TEST.

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BEST NEW PRODUCT
INTRODUCTION

AMES C. COOPER & KATHLEEN MADIGAN

PROFITS: AN EVEN MORE IMPORTANT LEAF TO READ

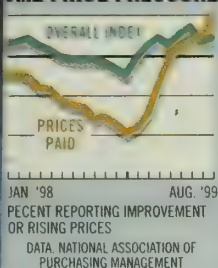
With stock prices driving demand, earnings take on a bigger role

U.S. ECONOMY

More than anything else, the surge in the profitability of American corporations has been the root of the U.S. stock market's incredible run in recent years. Whether the run-up in stock prices has been overdone is a question that investors and policymakers at the Federal Reserve continue to grapple with. But the fact remains that the outlook for earnings will always be the central factor in determining stock prices. And stock prices have become an increasingly integral part of evaluating the economic outlook.

The economy, equity markets, and profits were very much on the mind of Fed Chairman Alan Greenspan at the Kansas City Fed's Aug. 26-28 symposium in Jackson Hole, Wyo. Greenspan said that a key issue for stock prices was the proper measurement of profits. He believes that some standard practices understate profits primarily because the rapid growth of technology is blurring the difference between a capital outlay that generates future returns and an expense that is simply summed during the production process.

PURCHASERS REPORT SOME PRICE PRESSURES



For example, he said, many companies expense computer software, which cuts into profits, even though software should be capitalized. Under-capitalized costs are a support under current stock values, Greenspan said. But even after all proper adjustments to profits are made, it is unlikely "that such adjustments can be the central explanation of the

extraordinary increase in stock prices over the past five years." As Greenspan said early in the speech, asset values rest on perceptions of the future. In particular, investors must be confident that profits will continue to grow.

WHAT IS THE OUTLOOK FOR PROFITS?

Based on the Commerce Dept.'s latest roundup of the second-quarter earnings of some 20,000 U.S. companies, profit prospects are good—but maybe not as terrific as the nearly 30% growth shown by some aggregations of big-company results last quarter. Earnings will be supported by the unrelenting vigor of U.S. demand and by renewed foreign buying. However, businesses face rising costs for both labor and raw materials (chart).

Higher interest rates will cut into profitability as well.

Commerce reported that corporate profits, after putting inventories and depreciation on a replacement-cost basis, rose 4.8% from a year ago. That's a considerable improvement over the stagnation shown during most of 1998, but growth is about half the pace racked up in 1997. Moreover, after seasonal adjustment, Commerce said that second-quarter earnings actually fell from the first quarter.

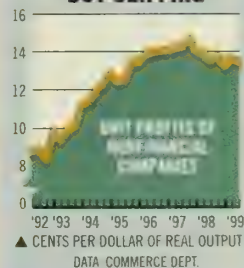
To be sure, corporate profitability remains historically high. But margins are under pressure for the first time in this 8½-year expansion (chart). In the second quarter, nonfinancial corporations made 13.5¢ for each dollar of real output, down from 13.7¢ in the first quarter and from an expansion high of 14.7¢ in the third quarter of 1997.

LABOR COSTS WILL BE A KEY PLAYER in the profit outlook in the coming year. They accelerated in the second quarter, and early signals from wages and ever-tighter labor markets suggest a continued pickup in this quarter. So far, productivity growth has been sufficient to offset rising labor costs, but a further acceleration in wages would require a commensurate speedup in productivity, which appears unlikely.

In addition, given the Fed's two rate hikes in as many months, each a quarter-point, and given the rise in long rates, many companies will be shelling out more in borrowing costs. Net interest paid by nonfinancial companies began rising last year. It hit \$100.6 billion last quarter, up from \$91.9 billion 1½ years ago. Interest expense will rise further in the second half as the recent rate hikes work their way into corporate borrowing costs.

Companies will also be paying out more for their materials and supplies. That was clear from the August survey of purchasing managers. In a report accidentally released one day early, the purchasers said that business activity in the industrial sector continued to pick up last month. The overall index rose to 54.2%, an increase from 53.4% in July, led by stronger readings on new orders, inventories, and employment. Most notably, the purchasers' index of prices that they paid for

PROFITABILITY IS HIGH BUT SLIPPING



Business Outlook

materials increased to their highest level in four years.

Revenue gains will be another crucial piece of the profits outlook. Luckily, consumers show little inclination to slow their spending. Real household spending posted a 0.2% gain in July. Vehicle purchases fell, but demand for electricity jumped as households pumped up their air conditioners in response to the record-breaking heat wave across most of the U.S. And consumer confidence in August remained near its 30-year high, set in June (chart).

HOUSEHOLDS CONTINUE TO SPEND more than they earn. Real aftertax incomes fell 0.1% in July, but incomes were lifted in June because of farm subsidy payments. Over the past year, real income has risen 3.4%, while spending is up a faster 5.1%. As a result, the July savings rate stayed in negative territory.

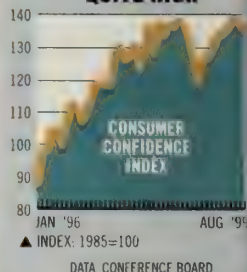
That gap between income and spending is being financed in part by stock market gains. But Greenspan also pointed out that rising house prices have played a bigger role. "It is evident that borrowings against the capital gains on homes influence consumer outlays beyond the effects of gains from financial assets," he said. Consumers are taking money out of their homes by home-equity loans and mortgage refinancings. Also, because of tax-law changes, sellers no longer have to roll over all of the capital gain from a home sale. Instead, they can buy a smaller house and pocket some of the money.

As long as home demand remains strong and sell prices continue to rise, homeowners will feel rich and will be more likely to spend. And so far, home sales remain robust, even with rising mortgage rates. New single-family home sales edged up 0.1% in July to a 980,000 annual rate, while June's rate was revised up sharply from 929,000 to 979,000.

Given the recent slowdown in mortgage applications, sales have probably peaked. But the strength in housing also has a spillover effect on consumer spending. Demand for furniture, lighting, textiles, and appliances will continue to rise even as home sales flatten out. Keep in mind that in the gross domestic product data, consumer spending on furniture and household equipment is larger than the value of residential investment.

When will the buying binge end? Undoubtedly, when some economic event spooks consumers. That's one reason why the Fed remains concerned about a "bubble" in the equity market. As Greenspan pointed out, the stock market and consumer demand have become linked. That's why an upbeat profits outlook is increasingly important to the outlook for the economy.

CONFIDENCE REMAINS QUITE HIGH



ECUADOR

RESTRUCTURING THE DEBT RESTRUCTURING

Ecuador, a \$14.5 billion economy with debts totaling \$13.3 billion, may default on its \$6 billion in Brady bonds. On Aug. 25, President Jamil Mahuad said the country would defer a \$96 million interest payment due Aug. 28 for 30 days, the Brady grace period. Ecuador, which faces millions more in various external obligations coming due by yearend, says it will attempt an unprecedented restructuring of its Brady debt, but the road will be difficult.

Ecuador's Brady bonds—named after former U.S. Treasury Secretary Nicholas Brady, who drafted the plan to restructure Latin American debt piled up in the 1980s and partly backed by U.S.

Treasury securities—are themselves the result of a 1994 debt restructuring. Also, any renegotiation will depend on the government's receiving a loan from the International Monetary Fund.

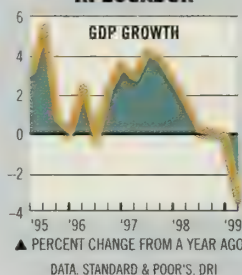
This is needed to restore investor confidence and to support Ecuador's sinking economy, which is expected to contract 7% this year, with inflation of 60%. The sudden Aug. 31 resignation of Finance Minister Ana Lucia Armijos, who was expected to coordinate the whole process, will only complicate matters. Economy Minister Guillermo Lasso will take over.

On Aug. 30, Ecuador signed an IMF loan agreement totaling \$1.25

billion, which would go toward bolstering foreign reserves. None of the IMF money can be used to pay debts to prevent selective bailout of private investors. The problem: The loan is contingent upon fiscal measures and banking reforms that are unlikely to pass the opposition-led Congress. Armijos' last official act was to introduce a \$4.2 billion IMF-approved budget for 2000, down sharply from \$5.2 billion in 1999, that is expected to fuel economic growth of 3% next year and cut inflation to 25%.

So far, the secondary market for other Latin American Bradys has taken the news in stride. But analysts fear that a default by Ecuador could taint other Brady debt, as well as retard the Latin American recovery by hiking risk premiums on many Latin investments.

DEEPENING TROUBLE IN ECUADOR





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WHY TALK IS SO CHEAP

In telecom's new economics,
phone rates are just promo tools

How low can long distance rates go? How about zero? You heard it right, free long-distance. That, industry executives concede privately, may be the ultimate outcome as they vie with one another to sign up customers for bundles of communications services—local and long-distance, Internet access, even television. In those bundles, long distance may be thrown in for no extra charge, even though carriers will lose 2¢ a minute on every call. Long-distance upstart Qwest Communications International Inc. already offers 250 minutes of long-distance calling to customers who sign up for a \$24.95-a-month Internet service. Phone companies aren't ready to broadcast the idea, but, says Jeffrey Kagan, an independent telecommunications analyst in Atlanta: "They'll be offering long distance for free."

That sort of puts the latest price war

among major long-distance carriers in perspective. Unlike previous battles, in which Candice Bergen morphed into the dime lady to help Sprint grab market share from rivals AT&T and MCI WorldCom by promising 10¢-per-minute calling, the new rate war is heading into uncharted territory. At any amount below 5¢ per minute, the rate that Sprint and MCI WorldCom began promoting in early August, it hardly pays to send out an itemized bill. That means that you'll soon see major carriers offering flat-rate monthly service.

BUCKETS. What's driving all this are the changes in technology and regulation that are erasing the distinctions between types of calling. With today's digital networks, there's not much reason to think about where a call goes or what it carries—voice, data, or video. On the regulatory side, the Federal Communications Commission and state

regulators are getting ready to let local phone companies into long distance (page 36). Once everybody playing in everyone else's market and the networks are completed, then the battle for telecom bundles will begin. "We can go to a customer and say, 'Here's a bucket of 500 minutes and you can use it for wireless and any other calls,'" says Len Lauer, president of Sprint Corp.'s consumer-services group.

For a sense of how rapidly long-distance is moving beyond the old rules, take a look at what's happening to industry leader AT&T. Ever since Michael Armstrong took over two years ago, the charismatic CEO has been trying to get ready for the time when long dis-



Soon, companies will be offering long distance for free

told analysts not to worry, however, since healthy growth in data, wireless, and other businesses will more than offset the consumer long-distance decline, which contributes about one-third of the \$62.4 billion in total revenues.

AT&T may not be able to hold the line at 7¢ for long. Sprint began offering long distance for 5¢ a minute from 7 p.m. until midnight every day, with 10¢ a minute at other times, plus a monthly \$5.95 charge. MCI unveiled nickel calls on weeknights and all day on weekends, and as much as 25¢ a minute during other times, with a monthly \$5 minimum. On Aug. 31, IDT Corp., a long-distance upstart, downed the ante—offering 5¢ a minute all day and a \$3.95 monthly fee.

These moves aren't as damaging to bottom lines as they might seem. The FCC has been cutting the fees long-distance carriers pay to regional phone companies to carry their calls—from 5.8¢ a minute in 1992 to about 3.3¢ today. "The FCC reduced long-distance carriers' network usage costs, giving them \$1.5 billion to pass on to consumers," says FCC Chairman William E. Kennard in a statement on AT&T's latest cut. The next step: an industry proposal to cut access fees to 1.1¢ a minute in five years. For now, the race is on to lock in customers with long-distance deals, and then sell a bundle of services—such as wireless and Net access—before other rivals can lure them away. AT&T is already offering discounts on its new long-distance plan to wireless subscribers. And it's gearing up to bundle local, long-distance, and cable services as soon as next year.

Bundling is a key to customer retention. Acquiring new customers is a far bigger cost than long-distance transmission. Lower rates also will make it tougher for Baby Bell companies to compete in long distance, even though they'll have an advantage in not having to pay pricey local-access charges. The Baby Bells, notes Armstrong, "certainly

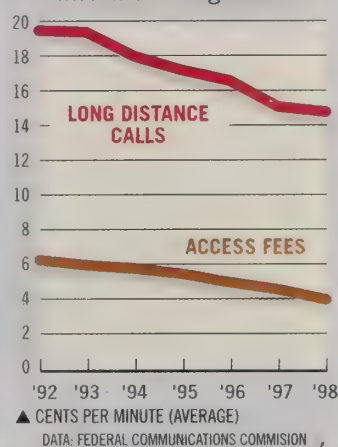
have less room to come in and make a difference based on price."

AT&T is best positioned, by far, to compete in bundled services, analysts say. Having paid \$110 billion for TeleCommunications International and MediaOne cable properties, it boasts a suite of wireless, data, Internet, cable-TV, and entertainment assets. In contrast, Sprint lacks its own high-speed Net-access service and cable TV; as does MCI, which also lacks wireless. "AT&T will be the ones to beat," says Blaik Kirby, a principal with Renaissance Worldwide Inc., a management consultant in Boston. "They have a bundle of products that over time will replace the core long-distance revenue."

NO LET-UP. Bundled services guarantee simplified billing. But not all will see lower prices. High-volume users, or those who call mainly during off-peak hours, will benefit. But after paying monthly fees of \$5.95 and \$2.50 in federal line charges, a consumer who makes, say, only 30 minutes of long distance calls

HEADING SOUTH

Even before the latest round of cuts, long-distance charges and access fees had already fallen, thanks to deregulation



a month under AT&T's new plan would pay \$10.55, or 35¢ a minute. That's more than double what AT&T charged the same customer two years ago, says Olivia Wein, a fellow at Consumers Union in Washington.

But downward pressure on rates won't let up. When voice calling over the Net improves, a whole new round of price-cutting could follow. Net2Phone Inc., a Hackensack (N.J.) startup, already sells long-distance at 4.9¢-per-minute, with a monthly charge of just 99¢. The savings are even greater internationally. If customers can use soundcard-equipped PCs, Net2Phone charges just 10¢ a minute to ring any phone in the U.S. from overseas.

Although still a tiny niche in the global telecom business, Internet telephony is gaining ground. AT&T is leasing international lines to Net2Phone and running its own limited Internet tele-

tance will no longer be the phone giant's cash cow.

Consumer and business long-distance services now make up 60% of Bell's revenues, but this percentage will be cut in half by 2004, admits the company. AT&T is facing a steady fall in long-distance market share, from 80% in 1990 to an estimated 40% by the end of this year, says Rex G. Mitchell, an analyst at Banc of America Securities.

With MCI WorldCom and Sprint announcing 5¢-per-minute calling plans, Armstrong now has had to pick up the pace. AT&T trotted out its own 7¢-per-minute plan on Aug. 30, a move that will nearly double the rate at which its consumer long-distance revenues will fall this year, to the 4% to 5% range, rather than 2% to 4%. That will shave some \$100 million off AT&T's consumer long-distance revenues, bringing 1999's total decline to about \$1 billion. Armstrong

frail down customers for bundles of other services

phony service in Asia. Sprint has begun trials of Net2Phone's service in Asia, and Compaq Computer Corp. is bundling Net2Phone's software into PCs it sells overseas. Next spring, Net2Phone plans to add voice to America Online Inc.'s Instant Messaging service, an offering that could soon be free,

says Net2Phone CEO Howard Balter.

It all adds up to a world where consumers pay a fixed fee to access a network that will provide the full range of voice, video, and data services. As with E-mail, distance will be divorced from price. "Consumers will have choices in what to bundle, and we'll offer discounts

and incentives to those who use more," says H. Eugene Lockhart, president of AT&T consumer services. Long distance will cost pennies, but companies will throw it in for free.

By Steven V. Brull in Los Angeles with Amy Barrett in Philadelphia and Roger Crockett in Chicago

COMMENTARY

By Catherine Yang

LET THE BABY BELLS REACH INTO LONG DISTANCE

With phone rates tumbling, you would hardly think the Baby Bells would be champing at the bit to get into long distance. But three—Bell Atlantic, SBC Communications, and BellSouth—are lobbying state regulators in New York, Texas, and Georgia, respectively, to let them get into the act.

More than three years after the 1996 Telecommunications Act passed, no Baby Bell has won regulatory approval to sell long-distance service within its region. The law requires the Bells to open up their local-calling markets to competition before being able to get into this new business. None has passed muster so far.

But the old test doesn't measure competition as well as it did: Wireless systems, Internet calling, and phone service over cable—and the ingenuity of countless entrepreneurs—have made the arbitrary distinction between long distance and local look like a throwback to Ma Bell days.

"STRONGER STICK." So it's time to start letting the Baby Bells into long distance. The likely first entrant is Bell Atlantic, which has been working closely with New York regulators to prove itself worthy. In particular, state officials want local-phone customers to be able to switch to a new local-service provider as easily as long-distance customers can today, and Bell Atlantic has been developing a system with this capability.

No doubt, a Bell Atlantic entry will



OLD TEST The arbitrary distinction between local and long distance is a throwback to the days of Ma Bell

spur the other Bells to become equally cooperative, if only to get the stock market boost that their long-distance entry is expected to produce. Says Robert C. Taylor, president of Focal Communications, a Chicago local phone company that competes with Ameritech Corp.: "Wall Street has a stronger stick than the regulators."

There is also some need to level the playing field when AT&T enters the local market, which it plans to do through the cable systems it has been snapping up. The Federal Communications Commission has already sided with AT&T on one key issue, supporting the giant's stand against "open access" for data services over cable. Internet service providers want to force AT&T to carry all data services on an equal basis, rather than giving favor-

able terms to Excite @home, in which it is a major investor.

Meanwhile, the regulators warn that even with the looming entry of AT&T, Bells still have to comply with the law. "The Bells will get long-distance relief when they satisfy the competitive checklist," says Larry Strickling, chief of the Common Carrier Bureau at the FCC. "What other competitors do in the marketplace doesn't make much difference." But he does concede that "these companies are doing a lot more than they were two years ago."

Many expect state regulators to grant approval to the first Bell sometime this fall and the FCC to move early next year. "Bell entry

into New York will be the single most important telecom event of the year," says Scott C. Cleland, an analyst at Legg Mason's Precursor Group.

Ultimately, this is all a prelude to consumers buying telecom bundles from a new generation of megatelecoms. "In the long term, there will be a handful of large companies offering Internet, long-distance, local, and wireless services," says Larry Darby of Darby & Associates, a Washington telecom consultant. A primary goal of the Telecom Act was erasing arbitrary distinctions between service markets. Now that the virtuous cycle of competition between the two sectors is starting, let the games begin.

Yang covers telecommunications policy for BUSINESS WEEK in Washington.



STARTING SMALL

McNealy expects small business and schools to be his first customers

Office suite, into a Web-based product called StarPortal. A Net company like Yahoo! Inc. could include a word-processing applet on its site, so customers could create, store, and distribute memos from wherever they log on.

"Software is going to be delivered as a service," says Gary L. Steele, CEO of Portera Systems Inc., an E-commerce company that plans to offer Star's software.

OFFICE THREAT? And Sun's price is right for cyber execs like Steele. Sun plans to give the Star programs to companies that agree to freely dispense the programs to customers across the Net. If it works, computer users would be able to access their files from whatever machine they log on from—say, a terminal in a hotel room or an airport kiosk. Even better, users wouldn't have to install new software to add new features. Instead, any time they fired up the software from the Net, they would automatically get the latest version.

McNealy says he isn't out to kill Office, which has more than 95% of the office productivity software market. But Sun thinks it can start to move customers away from pricey shrink-wrapped software that is continually made obsolete by upgrades. Big corporations that have millions invested in Windows applications are unlikely to switch, McNealy admits. "The enterprise is the last place this will happen," he says. "It will start in schools and small businesses."

Still, the odds of changing the software status quo are far better than they were four years ago, when Sun, among others, put forth the idea of network computers. Those stripped-down desktop machines were designed to get programming from the Net, but a lack of software and plunging PC prices limited the market for such an alternative. Now,

STRATEGIES

FREE SOFTWARE FROM ANYWHERE?

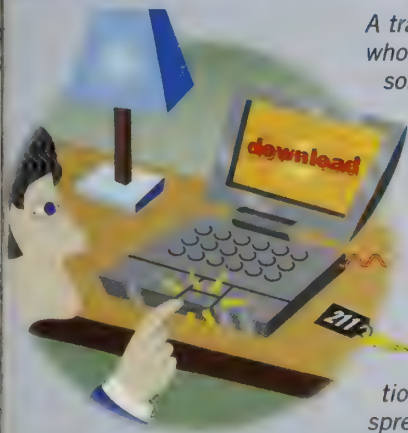
...n moves closer to a world not dependent on Microsoft

For years, Sun Microsystems Inc. Chief Executive Scott G. McNealy has been one of high tech's most al rebels against the digital world er set by software king Microsoft p. He has championed a vision in ch computer users would no longer tied to PCs crammed with Microsoft ware. Rather, they could tap into pputing resources—including all their nail and favorite programs—when- r they wanted, as long as they could ke a connection to the Internet. It was bold talk. And until now, it

was just talk. But in the past year, Sun has been developing and acquiring technology that, when combined with its back-office computers, makes the notion of a world of computing beyond Microsoft far more credible. On Aug. 31, McNealy filled a key gap in the strategy: Sun announced the purchase of Fremont (Calif.)-based Star Division, which has office programs that can run on Windows, Linux, Sun's Solaris, and other software.

What's the big deal? By early next year, Sun will convert Star's suite, which includes a spreadsheet and word processor that are compatible with the Excel and Word programs that are the mainstays of Microsoft's market-dominating

SOFTWARE ON DEMAND



A traveling executive who needs to crunch some numbers for a meeting logs onto the Web and clicks onto her favorite portal site. She scans E-mail, downloads some data about today's commodity prices. Then, to update earnings projections, she uses a spreadsheet application.

1 The spreadsheet does not exist on her computer—which may be just a keyboard that allows her to tap into the Net. It is supplied over the Net by an Internet portal, which offers applications programs along with other Web information and services.

2 More and more, portals are relying on a new breed of company called "application service providers," who maintain their programs, distribute them over the Net, and ensure round-the-clock availability.

1 Since such "apps-on-tap" reside on back-office server computers, server makers like Sun are pushing this trend. That's why Sun plans to give away the office programs made by Star Division Corp., which it acquired on Aug. 5.

the Online Revolution is in full swing, and millions of computer users already routinely turn to the Net for programming, such as Juno Online Services Inc.'s E-mail system or Yahoo!'s free calendar program. So getting full-blown productivity software off of the Net isn't such a stretch.

FREE COMPUTERS. Meanwhile, a new class of Internet software company has sprouted up to help push this "apps on tap" approach. Companies ranging from start-ups like Corio Inc. and Digex Inc. to giants like AT&T and U S West have set up shop as so-called application service providers. Their role: to provide programs and service over the Net. SAP, Siebel Systems, and IBM's Lotus division have teamed up with these ASP's, and a bevy of newcomers are creating new apps on tap. Forrester Research Inc. believes the ASP industry will vault to \$21 billion by 2001.

Hewlett-Packard, anxious to break Sun's lock on the Internet market, is even giving its computers away for free to ASPs that are willing to share a percentage of their future revenues.

Once Star's software is made more Net-friendly early next year, users will be able to tap these programs from Palm Pilots and other handheld devices. Sun is expected to unveil a stripped-down "thin-client" computer to serve this market. And even Microsoft loyalists like HP are following suit. "We see the thin-client market growing to at least six million units in the next three years," says Wolfgang Baltes, general manager of HP's thin-client operation.

Before the Sun vision of software-on-demand comes into focus, lots more programmers will have to follow Star's lead. And the Net itself needs some upgrading: It's still not nearly as reliable a place to find your precious program as the C: drive. And consumers who depend upon dial-up modems won't like waiting for software for such simple jobs as printing out a memo.

But Sun's purchase of Star is a small but potentially important step, since it provides a slate of commonly used programs similar to what most people use now. Through its alliance with Netscape Communications, now a unit of America Online Inc., Sun also has a range of back-office E-commerce software that ASPs would use to deliver apps on tap. And its purchase of Forte Software gives it development tools that ASPs would use. It just might add up to a formidable challenge to the old order.

By Peter Burrows, with Michael Moeller in San Mateo, and Steve Hamm in New York

COMMENTARY

By Michael J. Mandel

THE NEW ECONOMY'S NEW CONVERT

When Alan Greenspan began ruminating out loud on Aug. 27 about the possible need for the Federal Reserve to deal with the dangers of a speculative asset bubble, Wall Street went into a swoon. Suddenly, investors who had confidently bid up shares—especially those getting a lift from the Internet and electronic commerce—became doubters.

But while some true believers may be having qualms, former skeptics are beginning to embrace New Economy logic as they put together predictions of good things to come for the U.S. economy.

On Sept. 9, Macroeconomic Advisers, one of the nation's leading economic forecasters—and a long-time critic of the whole notion of a technology-driven New Economy—will issue a report concluding that the U.S. is poised to enjoy a healthy degree of noninflationary growth. Why? Because as long as high-tech investment continues, productivity should grow at rates close to 2.3%. "Rapid growth in the capital stock is pretty much locked in" for the next couple of years, unless investment spending unexpectedly plunges, says Joel Prakken, chairman of the firm. "You can tolerate faster growth without worrying about inflation pressure."

IMPORTANT CLIENTS. This is a major change for the St. Louis-based forecaster, which was founded in 1982 by renowned inflation hawk Laurence H. Meyer (now a governor of the Federal Reserve Board), Prakken and President Chris Varvares. Given Macroeconomic Advisers' continuing close ties to the Fed and its current client list, which includes the Congressional Budget Office and the Office of Management & Budget, the new forecast could have a significant effect on fiscal and monetary policy.

The firm, which supplies one of three large-scale macroeconomic forecasting models in widespread use today (the others are from Standard and Poor's DRI and the Federal Reserve), now appears to be the most bullish of the U.S. economy. DRI (a unit of The McGraw-Hill Companies, which publishes BUSINESS WEEK) still puts trend productivity growth at 1.8%. Any estimate that goes higher, says David Wyss, DRI's chief economist, "is probably optimistic."

SPEED LIMITS?

Estimate of annual potential productivity growth

MACROECONOMIC ADVISERS	2.3%
REGIONAL FINANCIAL ASSOCIATES	2.0
CONGRESSIONAL BUDGET OFFICE	2.0
STANDARD & POOR'S DRI	1.8

Macroeconomic Advisers' new estimate of productivity growth, if accepted, could make it easier for the Congressional Budget Office and Office of Management & Budget to raise their long-term growth projections. Budget planners have generally stuck close to the "consensus" forecast of about 1.8%

or so. But spin out the new forecasts for 10 years, and "you'd have a much bigger surplus," says Prakken.

GENTLER BRAKING. In terms of monetary policy, the higher productivity estimates would not eliminate the need to slow the economy. However, they certainly would limit how much tightening would be appropriate, says Prakken. Accepting faster growth, of course, goes a long way toward justifying lofty valuations in the stock market.

There are dangers. Macroeconomic Advisers' new forecasts of rapid productivity growth depend on continuing declines in the cost of technology and no letup in the investment boom. Neither trend is guaranteed. And if the equity market should plunge, businesses are likely to find it harder to raise capital for investment, dampening the productivity boom. But until that happens, the good times should roll.

Mandel is BUSINESS WEEK's economics editor.

COMMENTARY

By Howard Gleckman

ON CONGRESS' HIT LIST: CRUCIAL BUSINESS DATA

Is the U.S. economy slowing? How much business is really done over the Internet? What impact are computers having on productivity?

Intriguing questions. And folks from the Federal Reserve Board to Wall Street to Main Street would love to have the answers. But they won't anytime soon. That's because the federal agencies that gather and crunch those numbers are about to get caught up in an ugly federal budget squeeze. Not that anyone has anything against them. But when lawmakers start fighting over how to trim programs to keep the budget within spending caps, the statistical agencies could get whacked.

But it's the public that will feel the pain. "When you look at the consequences, the costs [of budget cuts] are tremendous," says Diane C. Swonk, Bank One Corp. chief economist and president of the National Assn. for Business Economics. The price: bad choices by business and policymakers, who will have to base decisions on second-rate data.

Beyond their devotion to their own poll numbers, most politicians don't seem to have much interest in how statistics are gathered. And the professional number-crunchers in government, stashed away in agencies across the bureaucracy, have no voice on Capitol Hill. Only one statistical program—the upcoming Census—is getting any attention in Washington. And that's only because it is the key to congressional redistricting after 2000. Next year, the gathering and analysis of data will cost taxpayers a mere \$6 billion—and half will go to the census.

As much as business—and Wall Street—need solid data on the economy, they don't bother to lobby for funding. The agencies "are an orphan," says Everett M. Ehrlich, president of ESC Co., a capital consultancy,

and former Under Secretary of Commerce for Economic Affairs. "The people who use the data think they come from the statistical tooth fairy."

The bleeding has already begun. The House wants to freeze spending for the Commerce Dept.'s Bureau of Economic Analysis, the folks who put together the vital gross domestic product data. BEA, which

now has a \$44.2 million budget, wants just \$5.2 million more this year, in part to collect figures on E-commerce sales, as well as to modernize how it looks at computer software and financial services. But even that sum looks like it's in jeopardy.

What will happen to the Internet initiative? "We'll have to slow it down, do what we can with existing data," says BEA Director J. Steven Landefeld. In other words, keep guesstimating.

BLS BLUES. Matters could be even worse for the Bureau of Labor Statistics, which now spends \$399 million to produce a vast array of data, including jobs and inflation numbers.

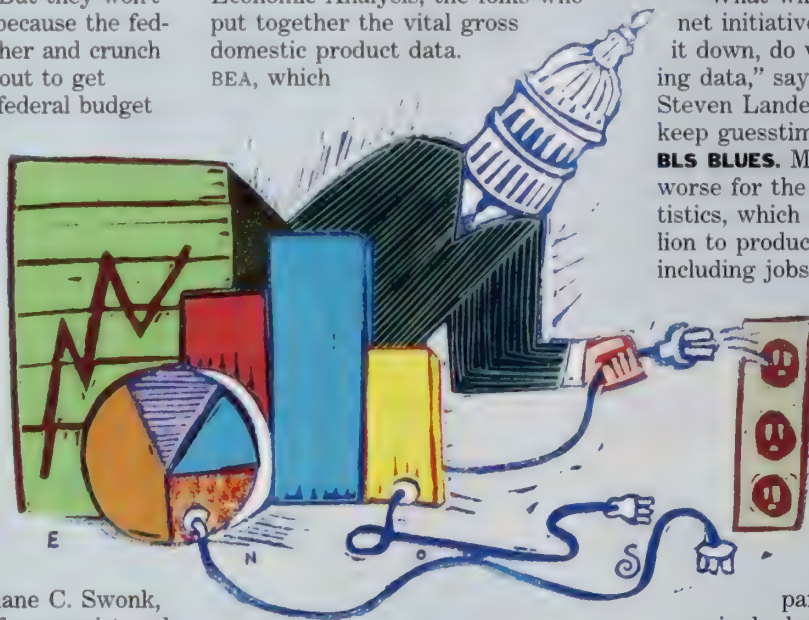
BLS, a tiny piece of the Labor Dept., may suffer bigtime in the nasty budget battle between the Republican-controlled Congress and the White House over funding for the Labor and Health & Human Services de-

partments, which share a single, huge spending bill.

BLS wants to spend an extra \$3 million next year to fix up the consumer price index. And it hopes to do a thorough review of the closely watched employment cost index, a series that has not been updated since it began—in 1975. Most importantly, BLS wants an extra \$5 million to overhaul its productivity data—perhaps the best predictor of standard of living. Today, government does a decent job figuring productivity for manufacturing, but on the service side, the data are very weak.

If Congress gets its way, that's how they will stay. In a \$1.8 trillion budget, the extra funding these agencies need to track the New Economy is trivial. But the data they collect provide the best window on where the economy is today. And without that information, how can policymakers decide where they want to go tomorrow?

Gleckman watches the Federal budget for BUSINESS WEEK.



STATISTICAL CRUNCH

Reduced budgets would place some key initiatives in jeopardy:

BUREAU OF LABOR STATISTICS

- Updating the consumer price index (CPI) and the producer price index (PPI).
- Reworking the employment cost index, a key measure of wages and benefits.
- Improving productivity measures for the fast-growing service sector.

CENSUS BUREAU

- Measuring E-commerce.
- Improving and expanding data collection from the service sector, especially financial services.
- Reworking measures of the value of computer software.

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WASHINGTON

HMOs ARE BEGINNING TO LOOK VULNERABLE

Even some in the GOP back patients' right to sue

The August recess began like any other for Representative Mark Foley (R-Fla.). He looked forward to a little R&R. But there was no escaping Washington. Shortly after Foley arrived home, powerful Beltway lobbies began pelting the third-term's district with radio and TV ads denouncing a patients' rights bill that Foley supports. The ads blasted the measure as a "lawyers' right-to-sue bill." Foley shrugs off the campaign. "I'm not going to be dissuaded by any ads," he says.

But the pressure will only intensify when Congress returns on Sept. 8.

Foley and 20 other Republicans who support a bipartisan patient-rights proposal, will be the target of an intensifying battle over managed-care reform legislation that the House is expected to vote on later this month. The key provision that insurers are determined to keep out of the law: letting patients sue HMOs and managed-care plans for damages. Before the recess, Foley & Co. split from the GOP leadership on this issue and put their support behind a measure that grants patients the right to sue insurers over treatment. Little wonder that big employers and insurers unleashed a \$1 million ad blitzkrieg to force the defectors back into the fold. Their major argument against the measure, sponsored by Representatives John D. Dingell (D-Mich.) and Charlie Norwood (R-Ga.), is that it would raise costs and encourage employers to drop coverage.



ADVOCATE: Norwood, a dentist, has long worked closely with the AMA

Norwood, a dentist who has worked closely with the American Medical Assn., has been a leading voice among House Republicans for a strong patient's bill of rights. Supporters of the "Dingwood" measure have been lobbying, too. In late August, a coalition of doctor and patient groups took out ads in 37 newspapers denouncing HMOs for putting "dollars first and patients last."

SAD STORIES. And when Congress returns to work, 2,000 Families USA activists will lobby lawmakers. For now, the Association of Trial Lawyers of America is keeping a low profile, hoping it can win if the debate doesn't turn into an attack on the plaintiffs' bar. The reform issue clearly resonates with voters. That's what brought 250 people to St. Mary's Catholic Church in Jensen Beach, Fla., on Aug. 30 to talk health care with Foley. For 90 minutes, the

lawmaker nodded sympathetically to participants, many elderly, recounting tales of \$80 prescriptions for eyedrops and other nightmares. Says Foley, "It gave me more courage to continue my quest for health-care reform."

GOP leaders are scrambling to back the renegades. But privately, business lobbyists admit that they may be too late to head off the right-to-sue

measure. "Maybe we can block it," sighs one. Their next step is to rally support for a new proposal, sponsored by Representatives Tom A. Coburn (R-Okla.) and John Shadegg (R-Ariz.) that would allow lawsuits against insurers—but only in federal court and only after an independent panel had certified that an injury was caused by lack of care.

Limited liability, insists Coburn, "is the only way to drive a hammer into the bad actors." That's

Criminals all have rights. Why don't patients?

far cry from the narrow patient-rights bill the Senate passed in July, which does not allow lawsuits during the House Speaker J. Dennis

Hastert (R-Ill.), a self-styled health-care expert who helped push through an HMO bill in the prior session that did not include any right to sue, is now widely expected to endorse the Coburn-Shadegg bill. But head-counters say Hastert lacks the votes to stop the "Dingwood" measure, which has solid Democratic support and 21 GOP co-sponsors. Insurers and other HMO reform foes now vow to fight to kill off any legislation that includes the right to sue. In the end, Coburn-Shadegg may attract pro-reform Republicans such as Foley, who says he's keeping an open mind. That still leaves insurers on the hook. But consumers, who have suffered through two years of debate already, will soon be closer to winning the right to take their grievances to court.

By Amy Borrus in Washington

How the HMO Reform Bills Differ

	DINGELL-NORWOOD	COBURN-SHADEGG	SENATE BILL
Americans Covered	161 million	161 million	48 million (most provisions)
Right to Sue HMO	Lets patients sue health plans in state courts	Lets patients sue health plans in federal court only after injuries have been certified by outside authority	None
Employer Liability	Some protections against lawsuits	Explicitly bars patients from suing employers	None

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AUTOS

IT'S A BMW! IT'S A PORSCHE! IT'S AN SUV

Fancy names crowd into the luxury sport-utility market

For a while it looked as if Mercedes-Benz, the carmaker that showed how to give the sport-utility vehicle that luxury cachet, was going to get trounced at its own game. With reports of quality problems and tough competition from the Lexus RX300, an even smoother-riding SUV hybrid, M-class sales in the U.S. tumbled more than 14% during the first half of 1999. But thanks to quality improvements and increased production, sales of the DaimlerChrysler sport-utility jumped 60% in July over 1998 and 11% in August.

Still, Mercedes can't afford to rest on its heated leather seats. Behind the RX300 is a burgeoning field of plusher \$40,000-plus SUVs. And while sales growth among traditional sport-utes has slowed, there's plenty of room for expansion—and hefty per-vehicle profit—in the luxury market.

REDEFINED. First up will be BMW, which will begin shipping its \$50,000 X5 sport-utility to dealers in November. It'll be followed by new SUV models from virtually every luxury nameplate over the next four years, including Saab and, believe it or not, even Porsche. Their motivation is simple, says Wes Brown, automotive analyst at NextTrend in Thousand Oaks, Calif.: "Companies saw people had these Jeep Grand Cherokees in their garages parked next to their Mercedes or BMW, and they said, 'I want a piece of that.'"

Fueled by sustained economic growth

and demographic shifts, sales of luxury SUVs are breathing life into a light-truck segment that was running out of gas. Indeed, sales of compact SUVs—the mainstream sector—have been flat for two years, and Standard & Poor's/DRI analyst Lincoln Merrihew predicts sales will dip 1.4% this year. "The RX was just what the doctor ordered," he says.

Introduced in April, 1998, the RX300 now represents more than one-third of all Lexus brand sales, and production capacity is tapped out at 70,000 units. But while the RX300 and M-Class essentially created the market, says NextTrend's Brown, the X5 "will completely redefine what luxury SUVs can be."

BMW, which already makes Range Rover SUVs through its Rover subsidiary, was slow to develop an SUV under its own nameplate because it insisted that the truck live up to BMW's "ultimate driving machine" performance standard, says dealer Frank Ursomarso of Union Park BMW in Wilmington, Del. "They're a year or more later than I would have liked," he admits. But he

thinks the X5 will make up lost ground quickly. Although sales will be limited the first year as BMW ramps up production, analysts expect annual sales of 35,000—and predict the high-performance X5 will take a bite out of the Lexus RX300 and the Mercedes M-class. Built at BMW's Spartanburg (S.C.) factory, the X5, like the Lexus, differs from conventional four-wheel-drive

vehicles because it's built on a truck frame. Instead, it features a type of unibody construction commonly used in passenger cars. That helps it absorb more energy in a crash, making the vehicle safer, BMW says.

Mercedes dealers say they aren't worried, however. "I think there's plenty [of business] to go around everybody," says Bob Burke, senior manager at House of Imports in Buena Park, Calif., the nation's largest Mercedes dealer. He notes

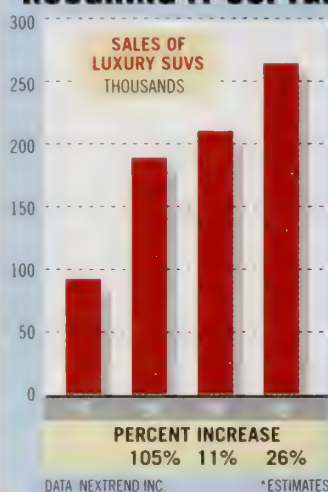
that the M-class got a boost after its crash-test rating in an insurance industry group's evaluation earlier this year.

GLITCH HITCH. But Mercedes is still building a slightly tarnished image. Last spring, the M-Class ranked near the bottom of J.D. Power & Associates' annual quality survey with problems such as electronic key fobs that didn't work, paint drips, and poorly aligned exterior parts. But Mercedes says it fixed the glitches. In fact, Michael Jackson, president of Mercedes-Benz USA, blames the sales drop on parent DaimlerChrysler's decision to divert U.S.-built vehicles to Europe, where the M-class was being launched, and not on quality problems. Now, Mercedes SUVs are being built at a plant in Austria to meet European demand. Although M-class sales are down 5% so far in 1999, Jackson expects to finish up the year with a 5% to 10% increase, despite the new competition.

Yet, to steal a bit of thunder from BMW, Mercedes will launch a souped-up version of the M-class, called the ML55, around the same time the X5 debuts. For makers of luxury SUVs, life's getting to be a traffic jam.

By Joann Muller
in Detroit

ROUGHING IT SOFTLY



STANDARD SETTER?

BMW's X5, due out this fall



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ENTREPRENEURS

WHERE NET STARTUPS GO TO BE BORN

eCompanies blazes into action with a richly funded incubator

It's nearly lunch time at the sparsely-furnished eighth-floor office of eCompanies, a three-month-old startup founded by Internet heavyweights Jake Winebaum and Sky Dayton. This space in Santa Monica, with large holes in the ceiling that expose concrete beams and air-conditioning ducts, is temporary. New offices are under construction 10 blocks away. Dayton, the 28-year-old founder of Internet service provider EarthLink Network Inc., is killing time with one of his many toys, a remote-controlled model car that he pilots across the office floor, over his sandaled foot, and headlong into an office wall. Dayton cracks up, but the car survives.

The speedy little car was a birthday gift from two founders of eHobbies, a Web venture that on Sept. 1 became the first startup to be hatched at the Internet industry's latest incubator, eCompanies. Announced in June as Winebaum was leaving his job as head of Internet businesses for Walt Disney Co., eCompanies is blazing onto the scene at a pace that looks breathtaking, even by Internet time.

Over lunch at Sushi Roku, a short walk from the office, the Internet's latest "angels" are bubbling with ideas for bringing goods and services to mouse-clicking consumers and businesses. The company is now getting as many as 300 proposals by E-mail every day but only three have already re-

ceived a go-ahead—one from Winebaum's eight-year-old daughter. She's not getting equity but, Dayton says, "she's going to get taken care of very well."

If all goes according to plan, a lot of people will be taken care of. In just 60 days, the two partners have put to-

gether both an incubator to nurture eight Internet startups a year and a \$130 million venture fund to finance companies when they're ready to leave the nest. The incubator, owned by Dayton and Winebaum with a small stake from EarthLink and family and friends, already has 22 employees, including a chief financial officer and experts in strategy, Web design, and marketing.

Investors in the fund, which will underwrite both eCompanies' offspring, include such ventures as eHobbies that are ready beyond the pampering stage, include Disney, EarthLink, Times Mirror, SunAmerica, Goldman Sachs, CS First Boston, Accel Partners, Soros F.

Management, and Kohlberg Kravis Roberts. "Independence of Jake or Sky's Internet expertise, what mattered was the size and value of the Rolodexes," says Jonathan Goodman, a University of Southern California professor and executive director of Egg Company Squared, the school's high-tech incubator responsible for Women.com Network, NetZero, and Veri Software.

UNKNOWN. While the framework seems to mimic idealab!, the Pasadena (Calif.)-based incubator of entrepreneur Bill Gross, there's a big difference. "Sky and Jake want to leverage off their investment base—all are potential customers or partners," says Rick L. Smith, managing director of SunAmerica Ventures. "We picked investors for more than the money," says Winebaum. "We picked them for strategic reasons."

But Winebaum and Dayton are virtual unknowns when it comes to venture capital. "They're both very successful individuals, but I don't know if they know our business very well," says Frank McCree, managing director of Zone Ventures, a Los Angeles venture



BABY COMPANY HATCHERIES

IDEALAB! Founded by entrepreneur Bill Gross, this Pasadena-based outfit holds interest in two dozen Net startups including eToys, FreePC, and GoTo.com. Provides funds and management expertise.

CMGI Best known for its early holdings in such Internet companies as Lycos and GeoCities, CMGI also has started companies from scratch in its Internet Group. They include iCast, Adsmart, and Engage Technologies.

eHATCHERY Atlanta-based incubator launched Aug. 23 by Jeff Levy, a founder of RelevantKnowledge. Partly funded by idealab!, eHatchery companies include eTour and Blue Rock Avenue.

eCOMPANIES The brainchild of high-profile Net execs Jake Winebaum and Sky Dayton promises to move Web companies from business plan to reality within six months. Raised \$130 million in 60 days to fund new ventures.

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capital affiliate of Silicon Valley's Draper Fisher Jurvetson. "They haven't proven they can pick and choose."

Winebaum and Dayton met three years ago at an Internet roundtable sponsored by the *Los Angeles Times*. They discovered that each was an avid snowboarder, and the following January they headed for Whistler Resort in British Columbia for the first of many

snowboarding trips. Killing time on the ski lifts, they'd talk about companies they wanted to start one day. They came close to partnering Disney and EarthLink in a venture code-named Cornice. Secret documents on the project referred to the pair by their snowboarding nicknames: "Sparky" (Dayton) and "Flipper" (Winebaum). Over dinner in May, Jake began talking about what

to do after Disney. "All of a sudden, the span of a couple of bites, it was if we were already in business," Winebaum says.

Winebaum and Dayton are still a giddy. But now comes the hard part: picking winners that will impress the army of brand-name investors.

By Larry Armstrong and R. Grover in Santa Monica, Calif.

\$276 MILLION: NOW THAT'S MOTIVATION

To Anthony Robbins, success is a matter of "Awakening the Giant Within." In his case, that giant is worth a ton of cash. The broad-jawed spokesman for self-esteem pulls in more than \$80 million from sales of books, tapes, and seminars annually. And now, he's self-helping his way into the dot.com craze. Trading on little more than name and charisma, the 39-year-old has become chairman and majority owner of a publicly traded Net company whose value now exceeds \$480 million. "We are developing the eBay of personal and professional empowerment," says Robbins.

The new company, GHS Inc., has no revenues from Net operations. It doesn't even have a Web site yet. In fact, the company has existed only as an obscure provider of medical services which, through what's known as a reverse merger, is giving Robbins a publicly traded stock without the time-consuming and disclosure-intensive process of an initial public offering. This maneuver has been managed by media banking powerhouse Allen & Co., a major investor in the original company.

SHELL GAME. Here's how it works: GHS's medical business is being spun out to shareholders in a separate company. That leaves a public shell company from which Robbins will launch a yet-to-be-named self-improvement Web site that hopes to include many of the brand names of the industry. The new dot.com will get the \$3 million in cash that GHS had on hand and \$15 million that Allen & Co. has raised through a private placement.

This backdoor route to public markets is usually associated with companies that have spotty records and shady pasts, not proven commodities like Allen and Robbins. But Allen & Co. defends the financing procedure as a perfectly sound way of creating

value for GHS shareholders. It also acknowledges that by the time GHS got its new site up and running and was ready for an IPO, the dot.com euphoria could have subsided.

So far at least, the deal has proven to be very lucrative for both banker and motivator. Since May, when Wall Street got word that Robbins was coming aboard and GHS would be recreated as a dot.com, the company's stock has soared from 75¢ to \$12. That has given Allen & Co. and some of its executives a \$48 million paper gain on their original \$250,000 investment in GHS 15 years ago.

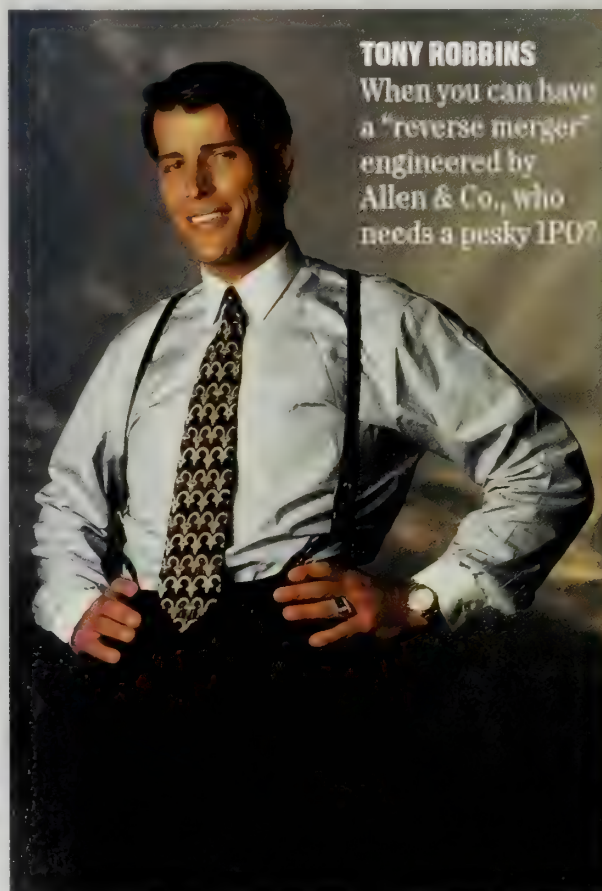
Robbins, who put in no cash, has a stake worth \$276 million. What justifies that kind of gain? Not much. The self-help guru gave the new venture exclusive online rights to his name, which it will use to develop Internet self-help seminars, chat rooms, and E-commerce sites. And Robbins' current Web site, anthonyrobbins.com, will be folded into GHS. But his \$80 million-plus business selling books and seminars will remain private.

SELF-HELP HUB. Allen & Co. is hoping that Robbins' marquee name will enlist other self-styled gurus and academics. GHS has already purchased the

online rights to San Francisco-based The Learning Access, which has more than 700 not-for-credit courses ranging from "How To Find True Love" to "Indoor Gardening."

No doubt, there is potential to be mined in self-improvement and personal enrichment—the market accounts for more than \$7 billion in video, book, and other sales. But there is also a lot of potential competition, according to Forrester Research Inc.'s Evie Black Dykema, from sites for women, such as iVillage.com, to a slew of new virtual universities. Even for Tony Robbins, pulling this venture off might require a giant even bigger than he has inside.

By Kathleen Morris in Los Angeles





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EDITED BY MARK FRANKEL

A BLOCKBUSTER HARVEST FOR APPLE

JUST TWO YEARS AFTER IT was left for dead, Apple Computer shares look poised to hit record heights. With the Aug. 31 announcement of its new, high-end G4 Mac computer, Apple's stock neared \$68 per share, last hit in 1993. When combined with the continued strong sales of Apple's colorful iMac and pent-up demand for its new iBook portable, analysts expect a blow-out December quarter. Consumers have put in orders for 140,000 units of the iBook, which is scheduled to ship in mid-September. "All the arrows are heading in the right direction," says longtime interim CEO Steven Jobs. What's more, Apple's

CLOSING BELL

IN THE DUMPS

Republic Services fell 35%, to 10%, after its Aug. 29 warning that 1999 earnings, less charges, will lag analyst predictions by up to 5%. The main culprit: underperforming assets acquired from Waste Management. But with that news coming on top of bad news by Waste, investors are worried about industry fundamentals, says Donaldson, Lufkin & Jenrette's Marc Sulam, who cut his '99 earnings estimate for Republic to \$1.18 from \$1.25 per share.



new Mac OS9 software, due out on Oct. 1, may bring an uptick in Net-related profits. The program contains a feature called Sherlock II that lets cyber-shoppers easily seek out the best deals on the Net. Apple is negotiating with E-merchants for hefty commissions, says an insider.

CAN THESE GUYS BEAM UP IRIDIUM?

ON SEPT. 1, IRIDIUM, THE beleaguered satellite phone company, announced it had hired New York turnaround firm Alvarez & Marsal. Iridium filed for Chapter 11 bankruptcy protection in August after failing to meet bond payments and revenue targets promised to bankers. Alvarez & Marsal will prepare a restructuring plan for the company. The firm's managing director, Joseph A. Bondi, will serve as Iridium's chief restructuring officer, while Managing Director David R. Gibson will act as the interim chief financial officer, replacing Leo Mondale, who resigned.

INTEL CHIPS AWAY AT NETWORKING

INTEL IS WADING DEEPER INTO computer networking. On Sept. 1, the semiconductor giant unveiled 13 chips meant to be used in communications gear such as Internet routers and data switches. Until now, the Santa Clara (Calif.) company has made chips mostly for PCs, but Intel is trying to duplicate its earlier success by using the same tactic in networking: hawking general-purpose chips to companies who design them into products. "We want to be the building-block supplier to the Internet economy," says CEO Craig Barrett. Analysts and rivals think Intel may find that a tough sell in the fragmented networking business.

HEADLINER: WILLIAM FARLEY

SOURD GRAPES

William Farley will no longer be minding the knitting at Fruit of the Loom. On Aug. 30, the company announced both that its flamboyant executive was giving up his post as CEO and that earnings for the maker of T-shirts and underwear would fall "significantly below" Wall Street estimates for the rest of this year. Since Farley, briefly a Democratic Presidential wannabe, took control of the company through a leveraged buyout back in 1985, the undergarment company has been slowly unraveling. Lately, production and



customer service snafus caused a 12% dip in first-half sales, while the stock has fallen from a peak of \$48 per share in 1993 to less than \$7 recently. "He ran a great business into the ground," says one investor who continues to hold the stock. Farley, who could not be reached for comment, will now occupy the newly formed "Office of the Chairman" with two other members of the board, says Dennis Bookshester, a director who will assume CEO duties until a permanent replacement can be found.
By Andrew Osterland

AHP: THE STING OF ANOTHER RECALL

AMERICAN HOME PRODUCTS IS facing yet another headache. On Aug. 31, the company announced it was recalling certain batches of a drug it produced for insect sting and food allergy kits after testing showed the drug lost potency before its expiration date. The drug is used to treat severe allergy attacks that can cause some children and adults to go into anaphylactic shock. The recall comes after a series of stumbles, including the recent suspension of shipments of a vaccine and ongoing litigation over alleged injury from two withdrawn diet drugs.

HEAVY DUTY FOR THE MARLBORO MAN

THE COST OF LIGHTING UP just increased: Philip Morris, the world's largest tobacco

company, on Aug. 30 raised the wholesale price of Marlboros and other brands 18¢ a pack—triggering copycat hikes by R.J. Reynolds, Brown & Williamson, and Lorillard Tobacco. Little of the hike will stay in the industry's pocket: Most will be the companies recoup a looming 10¢-a-pack federal excise tax hike, plus a 4¢-a-pack increase in the payments due to 46 states as part of a \$20 billion settlement.

ET CETERA...

- H&R Block will buy discount broker Olde Financial for \$850 million.
- Hilton is in talks to purchase Promus Hotel, owner of Hampton Inns.
- Upscale retailer Neiman Marcus reported an 83% drop in fourth-quarter net income.
- Ziff-Davis will sell its Market Intelligence unit to Harte-Hanks for \$101 million.

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TED BY PAULA DWYER

&D: IS CONGRESS CHOKING OFF THE FUEL OF THE NEW ECONOMY?

In Sept. 22, scores of scientists, students, and Chamber of Commerce reps from around the country will descend on Capitol Hill. Their message: Boost the federal research get that fuels development of everything from a better Internet to new vaccines. Without research and development funding, they will argue, thriving politicians wouldn't have a budget surplus to fight over.

"We've demonstrated that our research created the New Economy. Now, we're concerned that we are being trampled on as reward for creating the economy that made the plus possible," says an angry science-policy wonk.

But the R&D brigade is having a hard time getting lawmakers' attention. "This year's federal budget for science is a disaster," says Yale University physicist D. Ian Bromley, former science adviser to President George Bush. "Congress has lost sight of the critical role science plays."

LESSER LIVES. Indeed, the numbers are grim. NASA's budget is down by \$1 billion, threatening some 30 space missions. The National Science Foundation, which expected a 7% hike, is flat. So far, the House has cut Clinton's nondefense R&D request by \$1.8 billion, or about 10%. "If such cuts are allowed to stand, we will all be leading lesser lives in a lesser land," says White House science adviser Neal F. Lane.

In the usual Washington game, threatened cuts for science appear in last-minute dealmaking. Last year, for example, Congress gave the National Institutes of Health a huge 15% increase as part of an overall boost for science. But even cynical Beltway hands say this year is different.

For one thing, the budget caps in the 1997 Balanced Budget Act really smart for the first time, leaving little money for cuts in discretionary programs. In fact, R&D may be just one of the funding victims as Republicans and Democrats argue

over the surplus and tax cuts, all the while itching for the other side to bust the caps.

On Sept. 1, White House Chief of Staff John D. Podesta weighed in, accusing the GOP of shortchanging the future by choosing tax cuts over R&D spending. "This is the wrong direction for our country," he said.

But the science community resents efforts to drag it into a political face-off. Instead, scientists hope to show that there is widespread voter support for research funding. Biomedical-research lobbying group Research!America has been polling voters in states with early Presidential contests, such as Iowa and New Hampshire. "If we hand the American people a tax cut, we'll give them an empty envelope when it comes to biomedical research," says Research! Vice-President Ray Merenstein. "That's not the envelope they want."

On Aug. 30, Merenstein visited Northern Illinois University in DeKalb, Ill., with House Speaker J. Dennis Hastert (R-Ill.). The good news, Merenstein says, is that Hastert understands the importance of research. The bad news is that he still sees tax cuts as a far higher priority.

The way out of this mess? Find more money. "It's obvious to me that we're going to have to go through a bipartisan effort to raise the caps," says Senate Budget Committee Chairman Pete V. Domenici (R-N.M.). But while Domenici insists that research spending would be favored, others aren't so sanguine. Busting the budget caps "would bring an Oklahoma land grab—and the science community doesn't have sharp elbows," says one top Senate aide.

In the end, biomedical research may emerge healthy. But there is a real possibility that other R&D areas may not get the funding levels that both scientists and economists believe are necessary to keep the New Economy cooking.

By John Carey



FUTURE SHUTTLE? NASA faces cuts

CAPITAL WRAPUP

McCONNELL MISFIRE?

• Kentucky GOP Senator Mitch McConnell's late July attempt to quash corporate support for campaign-finance reform may be backfiring. He recently sent withering letters to several unnamed execs suggesting that they resign from the Committee for Economic Development, a business group that endorses overhaul of campaign-finance laws. But none has heeded McConnell's call to step down, says the CED. Backing for the group's reforms has grown from 100 to 120

former and current top execs in the last week alone.

Now the CED plans to step up its crusade with a series of nationwide events and aggressive recruitment of reform advocates. A CED official says McConnell's tactic "upset a lot of corporate types who saw it as heavy-handed." McConnell oversees fundraising for GOP senators and is the leading critic of a bipartisan reform bill that would make it more difficult to raise campaign money. Both houses have scheduled floor debate on the measure for this fall.

GREENSPAN BACKLASH

► The Fed rate hike on Aug. 24 has rekindled passions among Presidential candidates about whether Chairman Alan Greenspan should be reappointed next year. Republicans Steve Forbes, Gary Bauer, and Dan Quayle lambasted the hike. Quayle says Greenspan "should consider taking early retirement." But George W. Bush and Elizabeth H. Dole still support the Fed chief. Vice-President Al Gore gives Greenspan's policy record an "A plus-plus." His term expires in June, 2000.

FRANCE

EN GARDE, WAL-MART

Retail rival Carrefour bulks up

All right, so it's not quite as good as winning the World Cup. But the French, dispirited after months of fruitless haggling to create Europe's largest bank, have bounced back by creating Europe's No. 1 retailer with the merger of home-grown chains Carrefour and Promodès Group. Carrefour's \$16.5 billion acquisition of Promodès, announced on Aug. 30, does far more than give France a national champion, though: The merger creates a much tougher playing field for Wal-Mart Stores Inc. in its drive to expand internationally.

With 8,800 stores in 26 countries and combined revenues of \$65 billion, Carrefour is set to challenge Wal-Mart around the globe. As Europe's new top dog, Carrefour can use its buying clout to extract deeper discounts from suppliers, undercutting rivals and accelerating a push toward consolidation in the industry. The Promodès deal also widens Carrefour's impressive lead in several Latin American and Asian countries. What's more, Promodès brings to the union a reputation for solid inventory and distribution systems, an area where Carrefour has long lagged behind Wal-Mart. "We're creating a worldwide retail leader," says Carrefour Chief Executive Daniel Bernard, who will head the merged company.

CRITICAL MASS. In Europe, the deal puts pressure on Wal-Mart to make another acquisition. The retailer already has holdings in Britain and Germany. But if it doesn't grab another partner soon, it could be left without the critical mass to become a major European player. Its biggest European holding, Britain's

Asda Group PLC, is only one-fifth the size of the bulked-up Carrefour. Likewise, Wal-Mart needs to counter Carrefour's expansion in emerging markets. Only hours after unveiling the Promodès deal, Carrefour announced the acquisition of three Brazilian chains, boosting its market share there above 20%, vs. 1.4% for Wal-Mart.

Certainly, Carrefour isn't about to dethrone Wal-Mart. Now the global No. 2, Carrefour is still far behind Wal-Mart in sales and market capitalization (table). Even if Wal-Mart has trouble growing in Europe, it has room to expand in the U.S., especially in the grocery business. Carrefour, by contrast, has fewer opportunities in its saturated home market. And despite Carrefour's headstart in Asia and Latin America, Wal-Mart has plenty of openings because mass-scale retailing in many countries is only starting to develop. "The scope for growth all over the region is tremendous," says Hans Vriens, a Hong Kong-

based vice-president for the U.S. consulting firm APCO Asia.

But Carrefour is a nimble competitor. Since 1963, when it opened the world's first hypermarket, selling groceries, clothing, and other merchandise under one roof, it has been a marketing pioneer. Today, a Carrefour shopper who stops in to buy groceries or a pair of tennis shoes can also get a watch repaired, order mobile-telephone service, rent a car, or book plane tickets and hotel rooms for a vacation. Wal-Mart offers few such services.

Carrefour also has been an innovator in store design, softening the look of its warehouse-size buildings by installing wood floors and nonfluorescent lights in some departments and putting service counters in the food department where shoppers can get meat, cheese, and bread sliced to order. "Carrefour has incredible depth and breadth of range," says Philippe Kaas, a partner in Paris of OC&C Strategy Consultants. Such services also boost margins: Carrefour's 1998 profits, up 13.6% from the year before, were \$755.2 million on sales of \$32 billion.

Equally striking has been Car-



Buying Promodès gives Carrefour the muscle to vie with Wal-Mart globally

CEO DANIEL BERNARD





HYPERMARKET: A Carrefour store in Rosny-sous-Bois outside Paris

Brazil and Argentina in the mid-1990s. To counter Wal-Mart, Carrefour slashed prices, remodeled, and even relocated stores. When a planned Wal-Mart store opening in one Argentine city was delayed by construction problems for four months, Carrefour seized the opportunity to renovate its closest store.

Wal-Mart, by contrast, has taken a cautious approach to foreign expansion, moving into Mexico in 1991 and then Canada before pushing into South America and Europe. It's the No. 1 retailer in Mexico, but foreign sales last year accounted for only 9% of Wal-Mart revenues, vs. 44% for Carrefour.

SHOPPING LIST. Carrefour, saying it sees greater growth potential elsewhere, has stayed out of Britain and Germany, the two European countries Wal-Mart has recently entered. Wal-Mart likewise has stayed away from Carrefour's strongholds in France and southern Europe. But that could soon change as European retailers brace for a shakeout. Governments in France, Germany, and other countries have moved to protect small merchants by placing a near-moratorium on large new stores. So the only way to grow is to acquire stores and squeeze more profits out of them.

Analysts expect Wal-Mart will look for an acquisition in France. That would not only give Wal-Mart a piece of Europe's No. 2 retail market after Germany but would also become a link in a European distribution network. That's key if Wal-Mart is to compete with players such as Carrefour, whose networks are already well-established.

Wal-Mart, however, is a careful buyer and is unlikely to rush into a

French acquisition. No matter. Other big European chains, including the Netherlands' Ahold, have said they are eyeing French retailers. "If Wal-Mart wants to get in, it really has to act quickly," says analyst David Shriver of Credit Suisse First Boston. Whether in Paris, São Paulo, or Seoul, these two global heavyweights will be duking it out for some time to come.

By Carol Matlack, with Inka Resch, in Paris and Wendy Zellner in Dallas, with bureau reports

TWO GIANTS FACE OFF

CARREFOUR

SALES \$65 billion*

MARKET CAP \$47 billion

STRENGTHS Innovative marketer, aggressive, experienced in foreign markets

WEAKNESSES Lacks strong logistical and information systems, crucial to improving efficiency

LIKELY NEXT MOVE Cut costs in Europe while pushing Asian and Latin American expansion

WAL-MART

SALES \$160.2 billion*

MARKET CAP \$200 billion

STRENGTHS Dominates U.S. market with superefficient supply and distribution network

WEAKNESSES Spotty record on foreign expansion

LIKELY NEXT MOVE Seek more acquisitions to extend its reach in Europe

*Forecast for 1999 DATA: BUSINESS WEEK

our's successful push into foreign markets. It can expand across Western Europe and into Latin America during the 1970s, opening its first store in Brazil in 1975. During the past decade, it has moved into Asia and Eastern Europe. Merged with Promès, Carrefour is the No. 1 retailer in Brazil, Argentina, and Taiwan, as well as in France, Spain, Portugal, Greece, Belgium. True, Carrefour has had setbacks. It made a disastrous foray into the U.S. market in the early 1980s, when it opened a handful of stores in the Philadelphia area and soon closed them because of weak sales. Emerging markets are risky business, Carrefour reported a net loss of \$1.4 million in Asia last year. Latin America's economic woes could hit Carrefour's bottom line this year.

A key challenge for Carrefour is logistics. Wal-Mart has clobbered its U.S. competitors by creating tight links with suppliers and fine-tuning its distribu-

tion system, squeezing out costs and allowing it to keep prices low. To compete, Carrefour will have to tighten control over its operations, which have been decentralized, says Ajay Hemnani, international retail analyst at Management Ventures Inc. in Cambridge, Mass.

But Carrefour has already proved its mettle in head-to-head combat with Wal-Mart. "They're just relentless—the toughest competitor I've ever seen anywhere," says a retail executive who watched Carrefour ward off Wal-Mart in

COMMENTARY

By David Fairlamb

A DEFEAT FOR BNP, A VICTORY FOR BANKING REFORM

What a victory for market forces! And in France, of all places.

Just before dawn on Aug. 28, Banque de France Governor Jean-Claude Trichet reluctantly ordered Banque Nationale de Paris to sell the 31.8% stake it had built up in Société Générale during a bitter six-month takeover battle. By so doing, Trichet acknowledged that shareholders rather than bureaucrats should control the restructuring of France's overcrowded banking system.

That's a huge step forward in a country where Finance Ministry and Central Bank functionaries have long had more influence over banks' strategies than have investors. The new way of doing things may be impossible for the authorities to control. It could be confusing and painful for the bankers involved. But it will ultimately benefit France far more than the outdated interventionism it replaces—even if some big banks end up in foreign hands.

Along with the rest of France's clubby and *dirigiste* Establishment, Trichet backed BNP Chairman Michel Pébureau's ambitious attempt to create a national champion by acquiring SG and Paribas. But Pébureau's \$36 billion bid for the two banks, which had agreed to a friendly \$19 billion merger, wasn't to the taste of SG shareholders. BNP amassed 65% of Paribas stock but failed to rake in enough SG shares to give it a boardroom veto.

For two weeks, Trichet tried vainly to persuade SG Chairman Daniel Bouton and Pébureau to work together. Bouton wouldn't budge, arguing that SG shareholders had rejected

Pébureau's bid decisively. And with the eyes of France's European Union partners upon him, Trichet caved in rather than be accused of subverting market forces—potentially damaging to the man due to succeed Wim Duisenberg as head of the European Central Bank.

FOREIGN MARAUDERS? Trichet's landmark decision scuttled Pébureau's plan to build Europe's largest bank. But it won't hold back the long-overdue restructuring of French banking. French banks remain under pressure

Crédit Lyonnais, which would offer cost-cutting chances as well as the corporate relationships that Pébureau sought with SG. In turn, SG could make a suitable partner for the Caisse Nationale de Crédit Agricole. Though CNAC is owned by France's mutual banks, it behaves like a private-sector bank. What's more, its investment banking subsidiary would give SG the entrée into underwriting, trading, and dealmaking that attracted Bouton to Paribas.

Such deals would be fine, provided shareholders have the final say. Meanwhile, both BNP and SG are weakened enough by their slugfest to be vulnerable to foreign predators. Significantly, they are seeking their own remedies instead of relying on the French government. Bouton has contacted British insurer CGU PLC, a friendly core shareholder that recently more than doubled its stake in SG to 6.9%. His primary aim: to strengthen cooperation and keep CGU as a



France's central banker had to unleash long pent-up market forces

**BANK OF FRANCE
GOVERNOR TRICHET**

to cut costs, boost profits, and bulk up by merging just like their euro zone rivals. The big question is, which banks will join forces, and when? And what role will foreigners play?

Parisian bank salons are already abuzz with rumors of possible deals. Some analysts are even talking about a rematch of the fight between SG

and BNP. "The two banks will be watching each other closely," says John D. Leonard, European banking analyst for Salomon Smith Barney in London. "And there's nothing to prevent one bidding for the other sometime in future."

The two former protagonists may look elsewhere. BNP might be tempted to bid for the recently privatized

possible white knight. Pébureau is mulling broadening BNP's cooperation pact with Germany's Dresdner Bank—possibly by raising the present 1% shareholdings they have in each other to 10%.

Those moves are designed to stave off foreign marauders. But by cozying up to CGU and Dresdner, SG and BNP are opening the doors to French involvement in big cross-border financial mergers. France has long been seen as the biggest obstacle to Continentwide restructuring—and not just in banking. By unleashing market forces at home, Trichet has made it much tougher for the French authorities to stifle such momentous deals. Investors should thank him: His failed gambit creates new horizons for the markets.

European Economics Correspondent Fairlamb covers banking.

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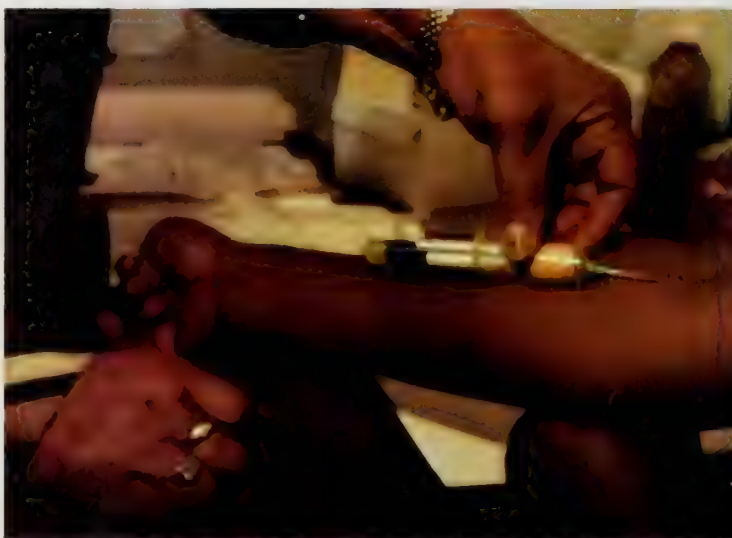
WILL THE AIDS PLAGUE CHANGE U.S. TRADE POLICY?

Pretoria may be permitted to use knockoff drugs

When South African President Thabo Mbeki travels to the U.S. in late September, he will start at the top—and stay there. The just-elected leader expects to meet both President Clinton and Vice-President Al Gore, address the U.N., and schmooze with business and financial execs. But there's more to Mbeki's trip than pomp and pressing flesh. Mbeki wants Washington to sign off on a controversial trade policy that pits copy-right and patent protection against the devastating consequences of an end-of-century tragedy.

A rampant AIDS epidemic is ripping through South Africa, and few victims can afford the costly drugs devised to keep the virus at bay. In a law passed two years ago, Pretoria claims the right to parallel imports—cheap knockoffs of patented medicines often made by countries that are not signatories to international copyrighting agreements. The health minister can also require that multinationals license local drugmakers to produce drugs patented by the likes of Merck & Co. and Glaxo Wellcome PLC, a practice called compulsory licensing.

LEGAL LIMBO. The big pharmaceutical companies fear that South Africa could inspire other nations to violate patents. Some 40 companies have sued in South African courts to get the law thrown



BLOOD TEST: *The epidemic won't peak for at least five years*

out. So far, Pretoria has suspended implementation of the law to avoid pariah status as a trading partner. Nonetheless, South Africa maintains its right to extraordinary measures. "We understand they want to make a profit," Health Minister Manto Tshabalala-Msimang says of the pharmaceutical companies. "But we as South Africans must help our people."

Which way Washington tips its hand is crucial. Drugmakers think U.S. Trade Representative Charlene Barshefsky should defend the global trading order—and their patents. She has—so far. But the moral and political implications are lost on no one. Vice-President Al Gore, who chairs a bilateral commission on U.S.-South African relations, is already a target of U.S. AIDS activists, who

claim Washington's official stance is a sellout to the drug companies. If the charge sticks, it could damage Gore's Presidential campaign.

The Administration is divided on the issue but Gore's staff is pushing for compromise. As Mbeki's visit approaches, there are signs the Administration may present him with a solution allowing Pretoria to pursue its plans without

prompting trade retaliation. **FUZZY WORDING.** One key to the solution resides in South Africa's vaguely worded law. U.S. trade officials suggest that in filling in the details, South Africa could comply with intellectual-property agreements even while seeking cheaper AIDS drugs. If Pretoria delivers on this point, a deal is possible. "Their policies seem designed to find ways to provide good health care and affordable medicines, and we fully support that," says one U.S. official. Even some drug-industry executives now think the Administration may reverse itself.

Mbeki needs a deal urgently.

Medical experts estimate that 16% of South African adults—3.2 million of a population of 40 million—are HIV positive. The plague isn't expected to peak for at least five years. Most AIDS sufferers won't get more than a broad-spectrum antibiotic and vitamins before they die. The economic impact is severe. In the mining industry, heavily reliant upon migrant workers, the infection rate is estimated as high as 45%. Says Wayne Myslik, head of consulting at Lifeworks, a Johannesburg health care provider: "It's the single greatest burden on the economy for the next generation."

Tshabalala-Msimang says South Africa is "held at ransom," since the multinationals won't cut prices enough for AIDS sufferers. The Pharmaceutical Manufacturers Assn. of South Africa says local companies aren't set up to produce these drugs. The industry has offered to sell some AIDS drugs at discounts, but Pretoria says they aren't big enough. PMA CEO Mirryena Deel adds that since the 1997 law was passed, members have made no new investments in South Africa. Grim stuff. When Mbeki hits Washington, he and Al Gore will have a lot to talk about.

By Kathy Chenault in Johannesburg with John Carey and Paul Magnusson in Washington

AIDS activists have been putting candidate Al Gore on the spot over Washington's patent protection

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SONIC YOUTH: Fans dress up as Sega's hedgehog mascot.

VIDEO GAMES

SEGA'S DREAM MACHINE

Dreamcast could put Sega back on top in the game world

Shoichiro Irimajiri, president of video-game maker Sega Enterprises Ltd., looked ready to whoop for joy as he strutted out of a recent meeting at Tokyo headquarters. U.S. consumers have ordered 300,000 units of the Sega Dreamcast, a lightning-fast game machine with dazzling graphics. And the Dreamcast won't hit the market until Sept. 9. "It's a record for game console launches in the U.S.," says Irimajiri, 59. "We're very excited."

Is Sega the once-and-future titan of the game universe? In this fickle business, anything is possible. In 1990, Kyoto-based Nintendo Co. was the undisputed leader, with nearly 90% of the \$13 billion global market for video-game software and hardware. Then came Sega, which by 1993 owned almost half the market with its popular Genesis. With PlayStation, Sony seized the title.

Sega, now a distant No. 3, hopes Dreamcast—the first player powered by a 128-bit microprocessor—will win it back the crown. Or it could be Sega's last hurrah. After a \$389 million loss in 1998 and big debt payments ahead, analysts say Sega cannot afford for Dreamcast sales to flag.

AWESOME. Whatever the outcome, Sega gets credit for one awesome machine. In European tests, Dreamcast was four times more powerful than PlayStation and two times more than Nintendo 64. And it's the first game machine with a built-in modem to log onto Sega's imminent online game service. To sell this gaming marvel, Sega is mounting a \$200 million global marketing blitz. In the U.S., its tactics run from trendy to downright wacky. It's sponsoring the MTV Video Music Awards and hosting hundreds of events across the country. Two

huge metallic "mother ship" truck jammed with Dreamcast consoles will visit 44 U.S. cities in the next three months. In Hollywood, gamers have splashed about in vats of mashed potatoes, looking for the letters making "Sega Dreamcast."

The goofy antics mask Sega's desperation. Sega's sales have dropped from \$3.9 billion in 1996 to \$2.4 billion last year. Meanwhile, Sony is determined to launch PlayStation 2, a 128-bit machine that will play DVD-formatted games, early next year in Japan, and in the U.S. by the following Christmas. In a recent demonstration, Sony showed flowing graphics of supercomputer quality. "Dreamcast is better than anything on the market now," says games-industry analyst Lisa Spicer of WestLB Securities Pacific in Tokyo. "But PlayStation 2 will be better, and Nintendo's Dolphin even better."

That's the big reason Dreamcast's early reception is crucial. In Japan, Sega has already recruited all the leading developers, enabling it to bring 70 titles to the market so far. It also has lined up such U.S. titles as the popular arcade fighting game *Soul Calibur*—advertised as "Hot Chicks. Massive Weapons." On Dreamcast, it will run at 60 frames per second—twice as fast as in arcades. But Sega eventually needs a much wider selection. Sony has 661 PlayStation titles in the U.S. alone.

Undaunted, Irimajiri is using a little guerrilla marketing to taunt his large rivals. When Sony rented the Wine Vineyards golf course in Livermore (Calif.) to stage a tournament for game developers recently, Sonic the Hedgehog, Sega's video-game mascot, crashed the party in a golf cart and unloaded hundreds of golf balls with Dreamcast's logo. An airplane dragging a Sega banner buzzed overhead. And in mid-August, Sega commissioned a huge sidewalk drawing of the Dreamcast logo in front of Sony's Metreon entertainment complex in San Francisco. Gentlemenly, no. But in the game business, you play to win.

By Irene M. Kunii in Tokyo, with Janet Rae-Dupree in Silicon Valley

JOCKEYING FOR SUPREMACY



PRESIDENT IRIMAJIRI

Sony Has slashed retail price on top-selling PlayStation to \$99 and beefing up U.S. marketing. Sony hopes the more powerful PlayStation 2, with DVD format, will be out next year.

DATA: BUSINESS WEEK

Sega Its new Dreamcast machine, much faster than a Pentium II-based PC and 15 times more powerful than the PlayStation, will have 16 different games. Advance orders are breaking records.

Nintendo The giant of the early 1990s aims to regain lead with its DVD-based Dolphin system, but it won't be out until 2001. Nintendo has improved graphics and cut prices on its popular N64.

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EDITED BY JOHN TEMPLEMAN

CAN MEXICO'S OPPOSITION PARTIES STOP OPPOSING EACH OTHER?

In Mexico, the opposition parties have steadily gained clout, thanks to a decade of democratic reforms. Today, they have a majority in the 500-seat lower house of Congress and hold 9 of the country's 13 state governorships. But the presidency, where power is concentrated, remains firmly in the hands of the Institutional Revolutionary Party (PRI)—largely because of disunity among the opposition.

Finally, though, the big prize is within their grasp. Eight of the 10 opposition parties said on Aug. 31 that they would hold

a primary in November to select a single Alliance for Mexico candidate to run against the PRI nominee in the next presidential election, on July 2, 2000. Also, they will field joint congressional candidates and are close to agreeing on a common government program to bridge the ideological gulfs among the main opposition groupings—the pro-business, center-right National Action Party (PAN) and the left-leaning Party of the Democratic Revolution (PRD).

PLURALISM. The platform is artfully vague to reassure Mexicans fearful of radical change after 70 years of PRI rule. The opposition promises to continue Mexico's free-market system, while investing more in education and social programs. The parties have agreed, though, to put privatization on hold and to take strong measures to combat the corruption that has marked PRI rule.

Burying rivalries won't ensure victory next July. But it's an essential first step toward making pluralism work for the opposition, not the PRI. Consider the July election for the governorship of the State of Mexico. Two opposition candidates together won 55% of the votes, but neither obtained enough to beat the lackluster PRI candidate, who sailed into office on a 41% share. "The PRI is pushing this idea of a multiparty

system so that it can hold on to power with a minority of the vote," says Vicente Fox, the PAN's presidential candidate.

The contest for the Alliance nomination could become sorimonious that the opposition again blows its chances. Fox, the charismatic former governor of Guanajuato state, faces Mexico City's unexciting Mayor Cuauhtémoc Cárdenas, the PRD's favorite son. Both feel entitled to the candidacy. But an Aug. 30 poll in *Reforma* showed that Fox, who once headed Coca-Cola Co.'s Mexico operations, could win about 39% of the

vote and run neck and neck with either of the two main PRI hopefuls. In contrast, Cárdenas would garner 25% or less, vs. the PRI's 47%.

Even if the primary isn't too bruising, some PRD and PAN members may not support an Alliance candidate from the other party. PRD diehards, for instance, may find it hard to back Fox in the general election: Even though the Alliance's platform advocates holding off on any more privatizations, Fox in the past has espoused eventual privatization of Petróleos Mexicanos, the state-run oil company. Likewise, some PAN members might find it anathema to vote for Cárdenas, who has advocated greater state control over the economy and initially opposed the North American Free Trade Agreement.

Still, opposition officials say they're willing to compromise in the same way politicians did in Chile and Spain, to complete Mexico's democratic transition. "We're not just trying to win the presidency," says PRD Secretary General Jesús Zambrano. "We're beginning to build a true democratic political system to put a definitive end to the one-party regime." If the Alliance holds, they will take a large step in that direction. But that's a big if.

By Geri Smith in Mexico City



ALLIANCE? Cárdenas of PRD and PAN's Fox

GLOBAL WRAPUP

A NEW LATIN DICTATOR?

► Latin American leaders are worried that Venezuelan President Hugo Chávez is turning one of the region's oldest democracies into a populist dictatorship. On Aug. 30, the Constituent Assembly, charged with rewriting the constitution and packed with Chávez loyalists, stripped Congress of most of its powers. Now, it is expected to give Chávez emergency authority to remove elected governors and mayors.

Chávez has tightened his grip on the economy, too. The president of

state-run oil company Petróleos de Venezuela quit, along with five top execs, after Chávez took control of the conglomerate, which provides 80% of Venezuela's exports and a third of tax revenues. Chávez promises to restore democratic checks and balances once a new constitution is approved. But skeptics wonder how readily he will surrender the absolute power he now wields.

TURKISH AFTERSHOCKS

► Turkey's government is earning new public scorn on top of the out-

rage stirred up by its slow response to the recent earthquake. Prime Minister Bulent Ecevit's three-party coalition rammed a bill through parliament that would halt corruption probes into coalition members.

President Suleyman Demirel refused to sign the bill, thus throwing the coalition's future into doubt. Meanwhile, nominations to a commission of inquiry into why so many buildings collapsed during the earthquake are raising suspicions of a coverup. The first appointee has close ties to the construction industry.

BOOMING FRANKFURT

's making a bid
to become the
financial capital
of the Continent

Crows pecking at piles of rubble are about the only sign of life at a former freight yard near downtown Frankfurt. Yet the 220-acre vacant lot is destined to become the biggest construction site in Europe. With almost \$5 billion in financing organized in part by Dresdner Bank, it will sprout luxury office buildings lining a grand boulevard, 10,000 apartments, and Europe's tallest building by 2006.

This isn't just a real estate project. It's an effort to create creature comforts for Europe's emerging class of dealmakers and entrepreneurs. As the euro and Internet shake up Europe's economies, Frankfurt is making a bid to become the financial capital of the Continent. Its stock exchange is at the forefront of efforts to unify European financial markets within the next two years. Headquarters of the European Central Bank, which sets monetary policy for the euro zone, Frankfurt is the hub for analysts and bankers trying to predict the ECB's next move.

EARLY START. The Frankfurt-based Neuer Markt is becoming Europe's premier exchange for high-growth, high-risk shares. Dozens of new biotech, software, and Internet companies are springing up around the city, founded by entrepreneurs who dream of Silicon Valley-style riches. In the past two years, the Neuer Markt has helped them to go public and create \$59 billion of new wealth.

Sound familiar? This is the same convergence of risk capital and innovation that in the U.S. and Britain fires the so-called New Economy. Now it's happening on the Continent, and Frankfurt is leading the way. "You notice it in the hotels, in the restaurants, in the shops,



THE BUSINESS DISTRICT
At last, some serious nightlife

FRANKFURT AT A GLANCE

POPULATION	640,000
FOREIGN CITIZENS	29.5%
LEADING EMPLOYERS	FRANKFURT AIRPORT, HOECHST, DEUTSCHE BANK
UNEMPLOYMENT RATE	7.2%

and on the street," says Ernst Welteke, who became president of the German Bundesbank on Sept. 1. "Frankfurt is booming."

Frankfurt has been in the money business at least since 1585, when a currency exchange was founded there. Its commercial banks nurtured Germany's post-war industrial boom, taking major stakes in and lending to the country's biggest companies. But what was long a quiet, German-oriented banking capital has become a far more lively, outward-looking place. The launch of the Neuer Markt two years ago and the founding of the ECB last year spurred a new dynamism as a younger generation of bankers and entrepreneurs flocked to the city.

Now, locals boast that no other European city except London is more unabashedly capitalist or willing to embrace technology and globalization. "This is really an international city at heart," says Michel Friedman, a lawyer and talk-show host who is a leader of Germany's Jewish community. Nearly a third of Frankfurt's 640,000 residents are foreigners, just one sign of the city's openness.

Frankfurt's ambitious attitude is reflected in the skyline. Destroyed in the war, Frankfurt made only a token attempt to restore its prewar architecture. Instead, the city features monuments such as the 50-story Commerzbank tower, the tallest building in Europe, London included. It will be surpassed by the 1,250-foot Millennium tower, part of the planned redevelopment of the former rail



MONEY TALKS:
Mayor Petra Roth
boosts her
town's assets

freight yard. Plans for 20 other new skyscrapers defy a three-year building recession in most other German cities.

The signs of a hot economy are multiplying. International banks are luring top merger and acquisition experts to Frankfurt with salaries ranging into the high seven figures. In the city's best neighborhoods, would-be buyers bid up the price of apartments that feature butler service, reaching sums in the millions of dollars. "We have an unbelievable boom in expensive living space," says Jürgen Weigand, president of real estate consultant Blumenauer Immobilien.

LOTS OF JOBS. While Germany's retailers complain of stagnant sales, shoppers on Frankfurt's pricey Goethe Strasse snap up Versace blouses and Bogner ski outfits. Sales of silk scarves and other luxury items at Hermes' Goethe Strasse shop have risen for eight years straight. "There's a lot of money in Frankfurt," crows Jürgen Vignold, general manager of Hermes' German unit. And the Frankfurt area's unemployment rate is a rela-

tively low 7.2%, compared with more than 10.1% in Germany as a whole.

Of course, Frankfurt will face plenty of competition as it tries to become the capital of the European Monetary Union. Paris isn't ready to concede Frankfurt's hegemony in financial markets, and it can boast some victories. Once the mighty German bund set the standard in the European bond market. Now, French government bonds are challenging the German to become the benchmark among shorter-term securities.

And Germany has much work to do if Frankfurt is to have a chance of rivaling London as a financial center. Even Frankfurt's top banks prefer to base operations such as equity analysis in the City. The biggest trading floor in Europe is in London. Its proprietor? Frankfurt-based Deutsche Bank. Highly paid finance professionals prefer London because its top tax rate is 40%, compared with 56% in Germany. The market capitalization of publicly traded British companies is \$2.6 trillion, more than double that in Germany, whose gross domestic product is 57% bigger than Britain's.

Still, Frankfurt is making inroads. The value of German stocks traded in Frankfurt last year was 40% higher than that of British stocks traded in London, according to German financial sources. The Frankfurt-Zurich Eurex derivatives exchange has become the biggest in the world. Frankfurt was chosen as the site for a new exchange that will trade electricity in Europe's newly deregulated energy market. The European Central Bank's interbank payment system handles more than \$1 trillion a day in overnight loans and other transfers between financial institutions.

One factor behind Frankfurt's growth is a fundamental shift in German attitudes toward savings. In the postwar era, citizens put their money in banks, and banks lent the money to industry. But Germans are no longer content to earn 2% on their savings. They're moving money into mutual funds, which have doubled in value since 1995. The number of people who own stocks has grown 28% since 1997. But it's still just 7.9% of the population of 82 million, according to the German Institute for Share Ownership, a research and lobbying group.

That's a third the level of the U.S., and half the level in Britain, suggesting there's plenty of room for growth. The

Frankfurt's Financial Scorecard

	FRANKFURT	LONDON	PARIS
STOCK EXCHANGE MARKET CAPITALIZATION	\$1.2 trillion	\$2.6 trillion	\$1.1 trillion
NUMBER OF FINANCIAL-SERVICE WORKERS	70,000	133,000*	100,000
MARKET CAPITALIZATION OF EXCHANGES FOR STARTUP COMPANIES	\$59 billion	\$10.6 billion*	\$5.9 billion
DERIVATIVES TRADING (number of contracts to July 1999)	213 million**	74.7 million	109.8 million

*London City only

**Eurex joint venture with the Swiss Exchange

DATA: STOCK EXCHANGES, GOVERNMENT AGENCIES



You

call it a cartoon. We call it a

documentary. Once upon a time, connect-

ing "gee whiz" devices was the kind of stuff you'd see in the Sunday comics and quickly chuck into the "yeah right" file. Fact is, what was once just newsprint-dot fantasy, Sun is turning into dot-com reality. From wristwatches and cell phones to stereos and automobiles, our Jini™ connection technology will enable all kinds of gizmos and appliances to simply connect to the Net and to each other. Based on Sun's Java™ software platform, Jini technology can do way more than just link products to the Net. It can link long-term customers to your business. (Another fantasy is true.) Whether you're a stereo manufacturer providing a monthly service so customers can download music from the Net or a car company giving a breakdown from a thousand miles away, Jini technology ties you to your customers in ways that make typical warranties and one-time purchases seem like yesterday's news. Need proof? Ask companies like Kodak, Philips and Bosch-Siemens. They're already using Jini technology to kick-start new opportunities that blow their business models way out in front of their competition's. Hey, it may have once been the stuff of the Sunday comics. Just make sure you're the one who's laughing.

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more daring investors are putting their money into young companies listed on the Neuer Markt. Initial public offerings doubled in Germany last year, to 78, and could almost double again this year. Some new listings have misfired, but stars such as entertainment company EM.TV have created instant millionaires.

The performance of Neuer Markt shares helped end a longtime shortage in venture capital by giving initial investors a better way to cash out. Investment by members of the German Venture Capital Assn., an industry group, rose 38% last year. "People have seen they can make an enormous amount of money in a short time," says Roland Welzbacher, partner of Concord Consulting, a Frankfurt-based investment bank that handles IPOs for smaller companies. Frankfurt stands to benefit

proximity to the source of money may give them an edge in gaining financing.

Take Jens Leinert, 33. He studied law at the University of Frankfurt but chose to start his own Internet company. In 1995, working out of his parents' basement, he founded Mails+Media, which helps smaller businesses sell products on the Internet. Located next to a beverage warehouse in the suburb of Eckenheim, the 10-employee company expects sales of \$543,000 this year and hopes to be profitable in 2002. His goal: to list on the Neuer Markt in two years. "For us, it's paradise," Leinert says of Frankfurt.

Older companies are using this new capital to grow at rates they wouldn't have dreamed of a few years ago. i:FAO was founded in 1977 as a travel agency but has offered online hotel booking since 1988. Now, i:FAO's Internet booking sys-

Goldman, which dominate mergers and acquisitions and big IPOs.

At the vanguard is the Deutsche Börse, which runs the Frankfurt stock exchange and Neuer Markt. When the Neuer Markt was founded in 1997, the Deutsche Börse forced companies seeking a listing to issue quarterly earnings reports, including an English translation. The Börse also insisted that companies use international or U.S. accounting standards, hold regular meetings for analysts, and adhere to voluntary standards protecting shareholders in case of takeover.

The measures were revolutionary in Germany, where companies were used to hiding profits with opaque bookkeeping and reported earnings only once a year. The rules built investor confidence and attracted foreign fund managers, and



as the premier conduit for investment. That flood of new capital in turn is driving an entrepreneurial boom as talented young people decide it's more exciting to design Web pages and earn stock options than spend decades working their way up some corporate ladder. "That plays as well here as it does anywhere else," says Paul M. Achleitner, managing director of Goldman Sachs & Co.'s Frankfurt office. Optimism about Frankfurt has prompted Goldman to boost its office to 300 people from a handful at the beginning of the decade. That's still a fraction of the 2,500 Goldman employs in London.

CAPITAL ATTRACTION. The companies fueled by this flood of new capital are often in Bavaria or the Black Forest, or scattered across the country. But many are locating in and around Frankfurt itself. There is no European Silicon Valley, where high-tech firms are concentrated and analysts and investment bankers can also congregate. So some entrepreneurs are moving to Frankfurt in hopes that

MILLIONAIRE'S ROW: Goethe Strasse is the place to go for luxury items

NET PLAY: E-companies like Mails+Media call Frankfurt "paradise"



tem is used by companies such as Siemens. Since a March IPO, i:FAO's share price has tripled, to \$61. With second-quarter sales of \$9.6 million, it has a market cap of \$327 million.

All this is a far cry from even a decade ago, when Deutsche Bank and other huge financial institutions dispensed most of the credit for the German economy and wielded huge influence. Now, those same banks are frantically recruiting investment bankers and persuading privately held businesses to sell shares rather than take out a loan. The potential could be enormous. The market capitalization of German companies is 39% of GDP, compared with 162% in Britain and 165% in the U.S. For now, Deutsche Bank and other German banks are playing catch-up with U.S. firms such as

helped spark a fourfold rise in the Neuer Markt's NEMAX index since the end of 1997. Now, the Neuer Markt commands 85% of the market capitalization of high-tech European issues.

Even reform-averse German politicians did their part by passing laws to make financial markets more transparent and flexible. For example, they tightened rules prohibiting insider trading. That boosted confidence in German exchanges and helped German banks keep pace with international peers in offering modern investment vehicles.

But it takes more than money to make a financial capital. One of Frankfurt's handicaps is a reputation for being well, boring. Lord Mayor Petra Roth raves about Frankfurt's pedestrian-only shopping streets, its bustling airport, and its proximity to fields and forests. But she concedes: "Let's be realistic. We can't compare to Paris or London."

That has economic consequences because it makes it harder for businesses to attract young talent. The rap isn't en-

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tirely fair, as nightclub owner Johnny Klinker insists. A leftist revolutionary turned entrepreneur, Klinker is proud of his unofficial title as Frankfurt's Lord Mayor of the Night. Ten years ago, he created the Tiger Palast, an effort to revive the German cabaret tradition stamped out by the Nazis. The show, which sells out months in advance, features jugglers, magicians, torch singers, and other exotic acts from around the world. Guests have included everyone from Deutsche Bank CEO Rolf E. Breuer to Bette Midler. The club's trademark:

tigers that perform a few feet from diners—uncaged, but with trainers.

Still, most of Frankfurt grows decidedly still after dark. Like most big cities, it has its seamy side, including open drug use in downtown subway stations and a raunchy red-light district near the main railroad station. Critics say it's too obsessed with money. "It's a cold, hideous city," growls Jürgen Gross, a beefy former police detective who writes crime novels set in Frankfurt but lives an hour away in rural Solms. "If you give top analysts a choice, they'll choose London

or Paris rather than Frankfurt," says Jean-François Théodore, CEO and chairman of the Paris Bourse.

City leaders want to give Frankfurt more zip. "Cities with a future are cities where young people dream of going," observes community leader Friedmann. Then again, many dreams are made of money. If Frankfurt keeps its lead as Europe's primary source of financing for entrepreneurs, the boom will go on.

By Jack Ewing, with Andrea Zammer in Frankfurt and Inka Resch in Paris

GERMANY'S POINT MAN FOR FINANCE

Ernst Welteke took office as president of Germany's Bundesbank on Sept. 1, a post that will also give him a voice at the European Central Bank and a key role in setting monetary policy for the 11 countries in the euro zone. The 56-year-old Welteke is currently president of the Bundesbank branch for the state of Hesse, where Frankfurt looms large as Germany's financial hub. He is also a member of the board of directors of Finanzplatz, which promotes Germany's financial-services industry. Welteke recently spoke with Frankfurt Bureau Chief Jack Ewing.

Q: Will Frankfurt overtake London as a financial center?

A: I don't think there will be one finance capital in Europe. There will be several with different specialties. London has fundamental advantages, including language and size. I consider it improbable that Frankfurt will overtake London as a financial center. On the Continent, there will always be competition between Paris and Frankfurt, and with smaller financial centers like Milan or Madrid.

Q: Does electronic technology present a threat to traditional financial centers?

A: The Internet and E-commerce mean that places won't be as important as networks. At the same time, I think the people who sift information must get together somewhere. The fact that the ECB is located in



"Naturally, Frankfurt will profit if the euro develops further as a reserve currency and investment medium"

ERNST WELTEKE

President of Germany's Bundesbank

Frankfurt hasn't attracted a lot of new banks. But the information service providers have come—news agencies, rating services.... Naturally, Frankfurt will profit if the euro develops further as a reserve currency and investment medium.

Q: Has the government helped promote financial markets?

A: In the past three years, we have had three capital-market reform laws. The supervision of securities trading through the prohibition of insider trading has improved substantially. [But] we can't stand still. Other reforms are

necessary, such as encouraging pension funds to promote stock ownership. Stock ownership in Germany is far behind the Anglo-Saxon countries.

Q: What about measures to improve labor market flexibility?

A: It's not easy to get rid of a worker who's no longer doing his work well. Reforms are necessary. But we also have to be careful we don't go too far. We can't simply adopt the American hire-and-fire model. But perhaps we should be more generous in making exceptions.

Q: Do Germany's high income taxes discourage businesspeople from coming to Frankfurt?

A: People look at the top tax rates. But if you look at disposable income and the cost of living and compare with London, I really doubt that Frankfurt comes out worse.

Q: Can significant reforms be expected from the current government?

A: The current finance minister [Hans Eichel] knows the needs of the financial center. Economics Minister Werner Müller has signaled his support for the financial industry. Whether the government can put through all the reforms that are necessary, we'll see in the coming months. The new government inherited a huge reform backlog. Crucial from my point of view is to reduce the growth of public debt, simply in order to have a little room to maneuver.



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INVESTOR RELATIONS

WHEN CAPITAL GETS ANTSY

How stock churning is reshaping Corporate America

On a recent Monday morning in New York, DoubleClick Inc. Chairman and CEO Kevin O'Connor delivers an upbeat pep talk and welcome to some 40 new recruits in a stuffy basement classroom. But his greeting also contains a cautionary appeal. "It's very easy to sit here and measure your success by the stock price," he says. "But we want to make long-term strategic decisions, even at the expense of the short term."

In an era when option-laden managers are often fixated on their company's stock price, O'Connor's admonition is an important one. As a super-hot dot.com company that has carved out a leading position in Web advertising, DoubleClick's stock has soared, thanks to the market's infatuation with the Internet. At the same time, though, that infatuation has turned DoubleClick stock into something of a poker chip at a blackjack table. The average DoubleClick investor holds on to the stock for a mere five trading days. The company's entire float—all the shares it has issued minus those held by insiders—

changes hands roughly 50 times a year.

DoubleClick isn't the only one. Capital has become more impatient than ever as greater numbers of people view the stock markets as casinos. It's not only day traders. Institutional investors, from mutual funds to pension funds, are also shrinking their time horizons. New data prepared for BUSINESS WEEK by Bain & Co. director Darrell K. Rigby show an astonishing increase in the speed with which shares now change hands. Some 76% of the shares of the average U.S. company listed on the New York Stock Exchange turned over last year. That's up from 46% in 1990 and only 12% in 1960. Through May of this year, the annualized rate was 82%. On the Nasdaq, where more high-flying, high-tech concerns are listed, shareholder turnover is nearly three times as high.

So far, most companies—especially Net stocks—have benefited from such

churn, largely because stock prices have remained high despite the recent correction. But if the market stalls or declines, many observers believe that impatient shareholders will bolt, turning what would otherwise be a normal retreat into a full collapse. An exaggerated reaction to negative news can hurt a company's ability to attract and retain key employees or use its stock for acquisitions. Higher volatility, economists say, also raises the cost of capital.

What does a shareholder who holds a stock for a week expect from a company's management team? Probably not a strategy that positions the business for long-term success. American managers have long lamented the pressure placed on them by Wall Street for short-term results. But as O'Connor along with most

The urgency to boost stock price fast has never been greater

traditional chieftains knows, the urgency to boost stock performance, and do so hastily, has never been greater.

That is why many in Corporate America are taking the trend seriously. They're paying vastly more attention to the care and feeding of Wall Street. How? By more closely monitoring and managing their core shareholders, re-

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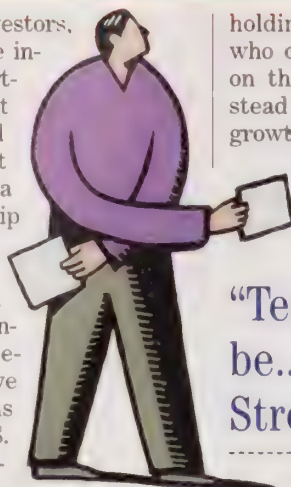


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cruiting long-term investors, and strengthening the investor-relations departments that interact with Wall Street and the people who put their money into a company's stock. Philip Morris Cos., the tobacco and food giant, is now trying to sign up more institutional investors in Europe because they tend to have longer time horizons than those in the U.S. Raytheon Co., the defense and electronics



holdings of managers and employees who can be tempted to make decisions on the basis of what is expedient instead of what is critical to long-term growth. "I've seen so many senior executives saying and doing things to deliver short-term good news lately that it's a little frightening," says Rigby, who has ex-

traced to a near-all-out focus on short-term results, most analysts agree. Chairman Albert J. Dunlap actively recruited managers and investors who were looking for a quick payoff and sacrificed company's long-term prospects in the process. When the payoff failed to materialize, Sunbeam imploded.

And it's not just basket cases

"Ten years ago, the notion that people would be...trading stocks daily would have been Wall Street's version of *The Twilight Zone*"

concern, is targeting longer-term investors with the goal of creating more stability in its stock. And a major U.S. chemical company set a goal of adding three long-term major shareholders to its investor base this year.

A closer look at the numbers shows why companies are taking action. The average share in Amazon.com Inc. is now held for seven trading days before being sold to someone else. The average share in Dell Computer Corp. changes hands every 3.7 months. Even Microsoft Corp. shareholders don't hang around long: less than seven months, on average.

Oh, sure, you're thinking, these high-tech stocks are the darlings of a new generation of computer jocks who bounce in and out of stocks by the minute. What about the stalwart blue chips?

Remarkably, shareholders are proving restive even at companies once considered the quintessential investments for the proverbial widows and orphans of yesterday. A share in AT&T is now held an average of 1.1 years, down from 3.1 in 1992. A General Motors Corp. shareholder stays with the company for just 51 weeks on average, less than half the 2.1-year commitment back in 1990.

The consequences of this shift are potentially profound. As shareholders become more ephemeral, their impatience gets passed along to the managers of the companies they are trading. That pressure, as DoubleClick's O'Connor acknowledges, can be reinforced by the stock options and share

tensively analyzed shareholder turnover. "Their time horizons are shortening. They're thinking more about retiring rich at 45 or 50 and less about the institution they will leave behind."

The financial meltdown that has nearly put appliance maker Sunbeam Corp. in bankruptcy, for example, can be

Sunbeam that are affected. In the more governance-conscious 1990s, increased churn can destabilize stronger companies, too. Jittery shareholders are likely to create jittery directors. To invite greater board scrutiny of management is hardly a bad thing. Yet when some investors bail out of a stock in volatile markets, others rapidly follow, and they more lose their nerve. That kind of cascade can cause hypervigilant directors to demand a reshuffling of management because even their longer-term shareholders have become more sensitive to downturns caused by bad news. Investors may think they can jump back when the downside risk is resolved. "Even if the management team is replaced and the strategy is changed, then the optimal long-term strategy may never get a chance," believes Rigby.

NO ACCIDENT. To be sure, faster shareholder turnover can have an upside, too, if it's not carried to an extreme. For one thing, it keeps capital markets efficient, enabling strong companies to acquire and integrate weak ones—especially in a rising market. For another, increased volatility keeps managers on their toes. It suggests that shareholders are regularly reassessing their commitment to a company and are giving executives less room for idle promises. "What's wrong with a little pressure for returns?" asks Edward V. Regan, former New York State comptroller and a key player in institutional shareholder activism.

Regan, who ran New York's pension funds for 14 years until 1993 and is now a fellow at the Jerome Levy Economics Institute, doesn't think it's an accident that churn has risen to nearly unprecedented proportions just as the American economy is in the midst of the longest peacetime economic expansion. "In the late '80s," he recalls, "executives asked us why we weren't like investors in Japan and Germany who didn't pressure companies for short-term results. Look at

LONG-TERM INVESTOR? IT'S ALL RELATIVE

COMPANY	AVERAGE TIME A SHARE IS HELD (BASED ON FLOAT)*
PRICELINE.COM	4 days
DOUBLECLICK	5 days
AMAZON.COM	7 days
YAHOO!	8 days
DELL COMPUTER	3.7 months
ABERCROMBIE & FITCH	3.8 months
DELTA AIR LINES	6.3 months
MICROSOFT	6.3 months
CISCO SYSTEMS	8.5 months
GILLETTE	11.1 months
IBM	13.8 months
WAL-MART	18.5 months
MCDONALD'S	22.1 months
PROCTER & GAMBLE	25.1 months
EMERSON ELECTRIC	25.6 months
BELL ATLANTIC	25.9 months
COCA-COLA	26.4 months
EXXON	29.6 months
JOHNSON & JOHNSON	30.2 months
GENERAL ELECTRIC	33.1 months

*The volume of shares traded as a percentage of the number of freely traded shares in the hands of the public, or shares outstanding minus shares held by insiders and owners of more than 5% of the company. Data based on trading days.

DATA: DARRELL K. RIGBY, BAIN & CO.

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the Chinese
web market
will be the
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see sina. see Chinese.

Japan now. I don't want the CEO to put his feet up on the desk and think that none of his shareholders will bother him."

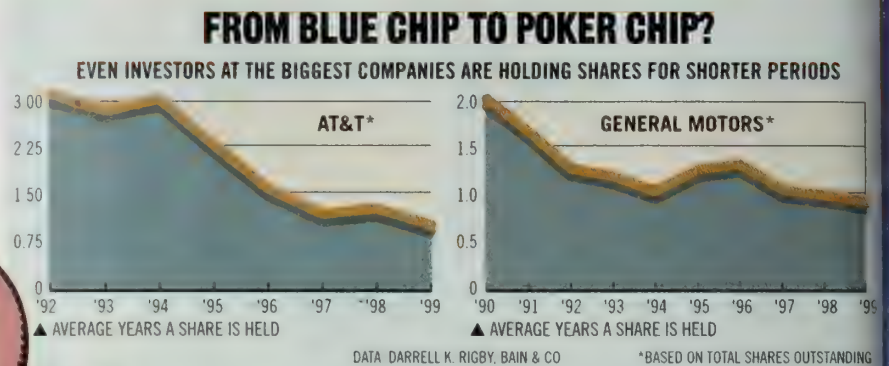
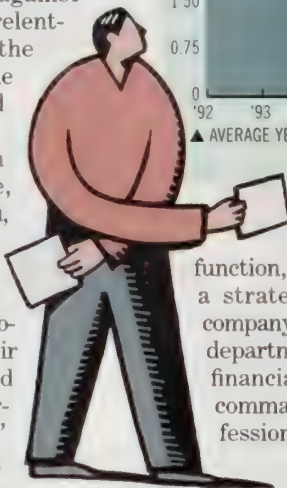
Most of the churning today, of course, can be traced to mutual funds, which own a higher percentage of stock than ever. Fund managers, who are constantly compared and judged against their peers, are under unrelenting pressure to eke out the highest returns possible. The result: They often buy and ditch stock daily.

Then there's the rise in day trading. The practice, which is spreading like kudzu, has greatly heightened the market's volatility—and left managers bemused. "Ten years ago, the notion that people would be sitting in their dens trading stock daily would have been Wall Street's version of *The Twilight Zone*," says James E. Chestnut, chief financial officer of Coca-Cola Co. "It makes it more challenging than ever to manage for the long term."

Rod Serling, however, would not have to limit this *Twilight Zone* episode to supercharged fund managers and Internet day traders. Even some of the nation's largest pension funds are turning over their investments more quickly. At the College Retirement Equities Fund's flagship stock account, with \$119.5 billion in assets under management, turnover hit 34.6% last year, up from only 16.3% in 1995. Most of that extra turnover is the result of CREF's use of modern computer-based analysis and trading systems that take advantage of the short-term up-and-down movements in stocks. CREF says the techniques have helped boost returns, though it can't quantify the improvement.

DATING GAME. As the exchanges extend their trading hours and churn becomes ever more prevalent, companies already are spending more time recruiting and communicating with shareholders willing to commit more patient capital. Coca-Cola and Pfizer Inc. are two companies that have pioneered the field of shareholder relations since the early 1990s. As a pharmaceutical company whose future is dependent on sizable research and development investments that can take years to pay off, Pfizer beefed up its investor-relations effort to enlist shareholders who more clearly understood the company's need to make those long-term bets.

Indeed, churning and the increased emphasis on "shareholder value creation" has helped to transform the field of in-



vestor relations. Once a ghetto of the public-relations function, it is increasingly considered a strategic tool to help position a company in the markets. Heads of IR departments now report to the chief financial officer or CEO and often command significant staffs of professionals trained in finance. "Our goal is to provide stability in our stock," says Barbara L. Gasper, vice-president for investor relations at Raytheon. "Volatility in a stock often implies uncertainty. Stability and predictability are things that investors are comfortable with. By broadening your shareholder base, that should help provide more stability."

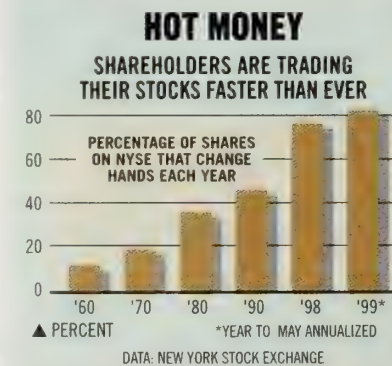
Most executives believe that high churn is a worrisome development and are working to create a core of long-term shareholders in their stocks. "It provides continuity and stability," says Robert L. Edwards, chief financial officer of Imation Corp., a data-storage spin-off of 3M. "It's in the long-term interests of all the stakeholders to have a

stitutional shareholders and their portfolios. "We help companies identify institutions that are likely to hold on to their stocks longer than a few minutes," says Richard A. Wines, senior managing director. Thompson prioritizes the most stable potential investors for a company and then helps to arrange a match, fine-tuning the company's appeal and arranging meetings to persuade prospective long-term shareholders to move into a company's stock.

High churn can be especially problematic for companies that are in the midst of a major overhaul in operations or spin-offs. "When there is a change in the strategic direction of the company, you've got monster turnover in shareholders," says Charles C. Conaway, president of CVS Corp., the \$17 billion drugstore chain. Conaway went through a seismic shift when CVS emerged out of a major restructuring in 1995 of Merck & Co., the retailing conglomerate. The change triggered nearly a complete turnover of the company's shareholders in one year. CVS actively recruited long-term institutional investors who would better meet CVS' new growth profile by visiting with as many as 40 major shareholders. "Unless you have a very targeted investor-relations program that communicates your message, you're going to get into trouble," says Conaway.

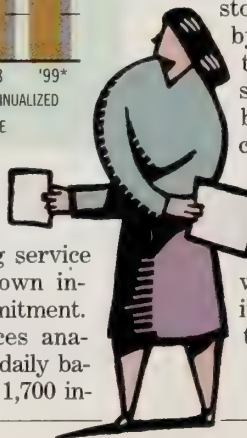
At DoubleClick, O'Connor doesn't want his employees—all of whom got stock options—to be so transfixed by the company's shares that they forget their overriding mission to provide solutions to DoubleClick's customers. "We don't care about the stock price at the end of the day," he says. "It comes down to solving the customers' problems, not the price of the stock." At a time when churning seems endemic, it is a message that more chiefs need to deliver.

By John A. Byrne
in New York



stable shareholder base."

Shareholder churn has even prompted the equivalent of an investment dating service to help companies track down investors with a sense of commitment. Thompson Financial Services analyzes investor turnover on a daily basis, closely monitoring some 1,700 in-



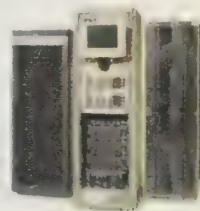


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DOT.COM OR BUST

Can traditional media hitch onto the Internet rocket?

On the surface, it was oh-so-chummy. A Wednesday night in July, with the attendees of investment bank Allen & Co.'s annual media mogulfest sipping cocktails and scarfing hors d'oeuvres on the terrace of a rustic lodge in Sun Valley, Idaho. Dressed in variations of country chic were the likes of Viacom's Sumner M. Redstone, Liberty Media's John C. Malone, Yahoo!'s Jerry Yang, and Amazon.com's Jeffrey P. Bezos.

But make no mistake, there was tension in the crisp mountain air—the tension of media barons who have spent decades building powerful empires, suddenly sharing the spotlight with Internet arrivistes who had amassed fortunes (albeit largely on paper) rivaling theirs in a few short years, even months. Indeed, the obsession among media players at the end of the 20th century is the race among “old” and “new” media to rule the Web. “Everyone’s wandering around here, trying to find the Promised Land,” says veteran media investor Larry Haverly of State Street Research.

Never mind wandering. At times, it seems more like the mosh pit at Woodstock '99—a lot of bouncing around but little sense being made. Just a sampling of recent activity: Walt Disney Co. announces plans to buy the 57% of Infoseek Corp. it doesn't already own and create a Web unit tied to its Go Network portal. Time Warner and Sony team up to buy CDnow, creating the biggest online music seller. USA Networks acquires Microsoft's Sidewalk.com city sites to merge with its Ticketmaster Online-

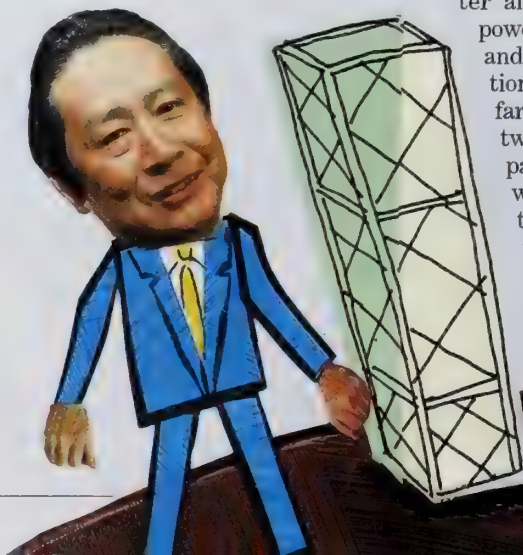
CitySearch. Rupert Murdoch's News Corp. launches a Web venture-capital arm, while CBS takes its umpteenth big stake in a Net company, Medscape. Meanwhile, Web titans Yahoo! and America Online separately hold talks with cable giant AT&T in hopes of hitching on to its high-speed Net access pipe and related assets.

OLIGOPOLY. Don't expect the gyrations to end anytime soon. With the Web's rampant growth and the nascent move to high-speed broadband links that will bring on the vaunted convergence of TV and PCs, the Net is shaking up the media giants' hard-fought oligopoly. Says Michael J. Wolf, head of the media practice at consultant Booz, Allen & Hamilton Inc.: “While traditional media com-

panies are slowly pushing their way online, Internet companies are going after the revenues that come from the media business.”

As a result, media companies are in a mad scramble to overtake or at the very least form alliances with Web rivals. After all, their online competitors boast powerful stock valuations, global reach and a range of services—from auctions to instant messaging—that go far beyond traditional offerings. Now two media strategies are alike (table on page 80): Some think portals are the way to go. Others believe that interactive TV will be the Web's ultimate “killer app.”

For now, the media moguls are confident—publicly, at least—that



SCRAMBLE

Media moguls and Web titans are jockeying to shape the online world

ROCKETEERS:

(Clockwise from top left) Microsoft's Bill Gates, USA Networks' Barry Diller, CBS' Mel Karmazin, Time Warner's Gerald Levin, Yahoo!'s Jerry Yang, AOL's Steve Case, NBC's Robert Wright, News Corp.'s Rupert Murdoch, Viacom's Sumner Redstone, and Sony's Nobuyuki Idei

and Time Warner's ill-fated Pathfinder magazine site. Add to that the fact that top Web players have the currency to buy up media assets such as TV networks.

So far, they haven't made a major acquisition yet, preferring to draw largely on other media's offerings when it comes to information or entertainment. "Media is a part of what we do, but we're a lot bigger than a media company," says AOL President Robert Pittman. (An MTV founder, Pittman has been known to call up Viacom Vice-Chairman Thomas E. Dooley and greet him with: "Hey, Tom, how's the Rust Belt?") To which Dooley has been known to reply: "Well, we're just making money here—you ever try that?")

Equally daunting is the global reach of the online giants. Disney, News Corp., and other media titans circle the globe, locking up local distribution deals to assure their prominence on TV screens. But

their existing content will ensure them prominence in the wild new digital world. Says Disney CEO Michael D. Eisner: "When the choices become vast, only things that will matter are brand names." News Corp. Chairman Rupert Murdoch envisions a "Fox World" based on his sports, news, and entertainment channels that will give his TV audience a familiar place to go. "The danger of the Internet is total confusion," says Murdoch. "That's why I think there will certainly be leading sites and leading positions." Redstone, whose Viacom Inc. includes the MTV and Nickelodeon channels, predicts that "in five years, I can guarantee you, we will have done the Internet what we did in cable." But can the media moguls really

recreate the Web in their own image? The rapid success of Web newcomers is eerily reminiscent of the rise under the Big Three networks' noses of niche cable channels such as CNN and ESPN. Already, there are small signs of erosion in TV viewing as people log on. "A few years ago, there wasn't an Amazon, and now, it's one of the most powerful brands in the Internet world," says Robert A. Iger, the ABC Group chairman who also oversees Disney's international operations. "That has to scare the heck out of any media company."

And Big Media's Web efforts have fallen short before, such as Murdoch's mid-'90s bid to create an AOL rival



they don't come close to Yahoo! in attracting audiences online. The four-year-old portal already has more than 80 million users worldwide, with dedicated services in 18 countries and 12 languages.

Yahoo! also boasts more than 2,700 advertisers on its portal, while AOL maintains a commanding lead in selling Web access, at 19 million subscribers and growing. Indeed, nearly 40% of the time Americans spend online is on AOL-

controlled sites. "You can't buy the delivery route," says Timothy A. Koogle, Yahoo!'s chairman and CEO. "And that gives—with good reason—traditional media companies some pause."

Those lagging in the cyberspace race can take comfort in the knowledge that it's still early. Communications consultant Francis O. McInerney of North River Ventures Inc. in New York notes that newspapers failed to control the

broadcasting business, and there's no guarantee that early Web leaders, which feature mainly text and images, will make the transition to full video. Fresh from his Web-obsessed schism, Allen & Co. CEO Herbert A. Allen says: "There has never been a time in business history when there has been such a potent force that's so indecipherable and inconclusive."

According to Jupiter Communicat

THE CYBERSPACE RACE

How old and new media are scrambling to control the Web

PORTAL **P**

CONTENT **C**

DISTRIBUTION **D**

E-COMMERCE* **E**

INTERNET STOCK **I**

PROMOTIONAL CLOUT **PC**

GLOBAL REACH **G**

ENTERTAINMENT GIANTS



CEO Michael Eisner has invested heavily in trying to beat Internet portals at their own game. So far, Disney's Go Network is the fifth-most visited site. It has great assets such as ABC and ESPN, but online leadership and direction are unclear.

P C I P G

TIME WARNER

CEO Gerald Levin is shaping hundreds of Web sites into five "hubs": sports, news, entertainment, business, and women. He is betting that his content will prevail and that he can attract a huge Internet audience through his cable holdings. But is his empire too unwieldy?

C D E P R

VIACOM

CEO Sumner Redstone vows Viacom will do on the Web for children and teens what it did on cable TV with Nickelodeon and MTV. Already, MTV.com is the most-visited music site, but with digital downloading of songs and videos, music is shaping up to be one of the Web's most competitive areas.

C D P G

News Corporation

Rupert Murdoch is betting that his TV Guide Inc.'s interactive programming guides will evolve into a major portal when TVs and PCs converge. Elsewhere, he's playing catch-up, including starting a \$300 million venture capital arm for Web investments.

C P G

NETWORK POWERHOUSES



NBC Following a big hit with MSNBC, the network hopes to build Snap.com into a leading portal and use its new Web stock, NBCi, to make more deals. So far, it is the best-positioned network for the new world.

P C I P G



CBS After CBS hit the Web stock jackpot by trading promotion for stakes in CBS MarketWatch and CBS Sportsline, CEO Mel Karmazin has snapped up about a dozen new dot.coms this year. So far, however, online efforts don't tie directly into CBS's programs in a big way.

P

E-PEDDLERS



CEO Barry Diller's shifting master plan combines traditional media assets (cable channels, TV stations) with interactive businesses such as Home Shopping Network and Ticketmaster. After the abandoned Lycos bid, he's looking for another big portal or traditional network to drive traffic.

C I P

SONY

Aside from its deal with Time Warner to buy music site CDnow, Sony has shied from big Web deals. But it may actually have a money-spinning business model on its hands with its popular online games.

P C E G

Bertelsmann

A partner with AOL in Europe, the company also has a large stake in barnesandnoble.com to go with its huge book-publishing unit. Its large music group is linked with Seagram in GetMusic.com. It wants to eliminate the middle man, but its online retail sales acumen is unproven.

C D E G

ONLINE HEAVYWEIGHTS



AMERICA ONLINE The world's No. 1 online service boasts revenue from subscriptions, advertising, and E-commerce. And its market cap is still \$100 billion. AOL's big challenges are lack of original content and competition from high-speed cable networks.

P D E I

YAHOO!

With more than 80 million users worldwide, Yahoo! offers a broader array of services and information than most anyone. Lacking content and broadband distribution, it may have to take on new partners.

P E I P G

Microsoft

Though lagging behind AOL, Microsoft has been beefing up its MSN portal, most recently with instant messaging. Plus it has sites for just about everything and has invested in broadband cable. Bill Gates's juggernaut can never be counted out.

P D C E G

*E-commerce as a major feature of strategy

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the Web accounted for only \$1.8 billion, or 1.2%, of the \$156 billion spent on overall advertising last year. By 2002, Jupiter expects Web advertising to jump to \$7.7 billion, or 4% of overall spending, as more Americans go online. But ads are only part of the story. A bigger game may be the \$250 billion direct-marketing business and the virtually endless prospects for E-commerce. Web direct marketing is young but growing, with sales expected to rise from \$190 million in 1998, to \$353 million this year and \$1.3 billion by 2002.

REVIVAL. Already, though, the Web has proved a mixed blessing for media companies. While it threatens established businesses with everything from pirated music to online classified ads, it has also shown it can breathe life into what were considered fading markets. Murdoch folded his unexciting *TV Guide* magazine into an interactive onscreen guide business with Malone. News Corp. has since seen its investment increase by as much as \$1 billion in stock market value. In a similar vein, by emphasizing its transactional acumen, USA Networks Chief Barry Diller has elevated Wall Street's view of his Home Shopping Network from déclassé to cutting edge.

Meanwhile, even as network TV audiences continue to decline, that business is enjoying a kind of revival as CBS and NBC demonstrate that their promotional heft can drive their still-big audiences to Web sites they hold stakes in—such as CBS's SportsLine USA. And NBC has deliberately favored a low-tech, touchy-feely ad campaign to pump up its Snap.com portal, recognizing that 70% of Americans are not yet online. "This isn't about the AOL people," says NBC CEO Robert C. Wright. "It's about taking a percentage of the new joiners."

Moreover, for some companies, such as Disney and Time Warner, selling merchandise and services is already an arm of their businesses. "Everybody talks about old media's transition to new media, but Yahoo! has to 'transition' just as much as I do," says Richard J. Bressler, chairman and CEO of the newly created Time Warner Digital Media. "So what

starting point would you rather have?"

At the same time that media companies have been expanding their Web presence, they have been boosting their forays into interactive TV. Using digital technology and new cable boxes (rather than PCs and browsers), some couch potatoes are already able to order shows on demand, shop, and get on the Net via such devices as Microsoft's WebTV.



OLD GUARD CEOs

CBS' Mel Karmazin and USA Networks' Barry Diller chat in Sun Valley

"Interactive TV is where we start to have home-court advantage," says Thomas S. Rogers, president of NBC Cable and the network's chief Web strategist. "It's one thing to use your PC to dial up Amazon.com. It's another when you're watching the *Today* show and an author has just been interviewed, and you click on an icon and order the book."

Disney is also conjuring just such a future. At its "telefusion" lab located in a string of warehouses in Glendale, Calif., focus groups play with a TV rigged to a supercomputer. Here they can watch a simulated segment of *Good Morning America* featuring chef Wolf-

gang Puck. The viewers can freeze a show, go online, and print a copy of his recipe, or buy related products instantly.

Not to be outdone, both Yahoo! and AOL have been working toward adding video to their arsenals, most notably through the recent acquisition by Yahoo! of Broadcast.com. And AOL has long been planning its own TV gizmo that could let subscribers watch shows, chat on the screen with friends about them, and buy the book instantly, bypassing Amazon.com or the networks' direct-sales efforts altogether.

To keep up, some companies, such as USA Networks and NBC, have set up Internet subsidiaries in hopes of creating higher-valued "currencies" to gobble up other Web businesses. CBS and Viacom have also said they plan to address Web stock issues, and even Microsoft—no slouch in the valuation department—has been considering a tracking stock for its Web businesses.

Another imperative for media companies to create a "Web currency" is to quell the stress of media types leaving for Wall Street riches. Disney has lost a dozen senior online folk including top exec, Jake J. Winebaum. But companies also face the prospect of water-cooler revolution if a new class of "dot.com" workers gets rich options while the rest are compensated traditionally. "That is a very tough issue for media companies," says Lehman Brothers Inc. analyst Larry C. Petrella.

So far, no one is panicking. As at Sun Valley, everyone is talking to everyone, smiling, doing deals that might give them a leg up—or at least jack the stock nicely. "This is the Cambrian explosion 550 million years ago, when multicelled life first appeared on the scene," says Amazon's Bezos. "It was the greatest speciation ever seen, but it was also—which people forget—the greatest rate of extinction ever seen. We're going to see all kinds of ideas tried, and the majority of them are probably going to fail." And when it comes to media cyberspace race, the dinosaurs are giving up without a fight.

By Richard Siklos in New York, with Linda Himelstein in San Mateo, Calif.; Ronald Grover in Los Angeles, and Catherine Yang in Washington

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TREAD CAREFULLY

Only a year ago, emerging markets were taking a beating. Asia seemed nowhere near struggling out of its fiscal crisis, and the Asian flu had infected Latin America. The *coup de grâce* came in August, when Russia defaulted on a portion of its debt. At the first anniversary of the crisis, the world looks quite different. As a group, emerging markets have far outpaced many U.S. indexes lately, rising nearly 70% since last August. Some pundits say even more gains lie ahead. But these markets are not for the faint of heart. Although several Asian economies are on the mend and Latin America boasts cheap valuations, history has proved emerging economies' stock markets to be wildly erratic. Says Standard & Poor's Corp. senior analyst David C. Masters: "The nature of emerging markets is that they are highly volatile."

Indeed, unless you have the discipline to plunge in when markets are in crisis and bail out when they're back in favor, you're unlikely to make money in the long run. "Emerging markets force you to be a contrarian investor,"

says Joe Rooney, London-based global investment strategist at Lehman Brothers Inc. Being an active trader, of course, flies in the face of the advice of many emerging-market fund managers, who insist that investors need to ride out downturns and exercise patience. But a look at how emerging-market bourses have performed over the long term—and how investors have fared in emerging-market mutual funds—suggests that Rooney's opportunistic approach, rather than the conventional buy-and-hold, may be the wisest strategy.

For example, say you jumped aboard Templeton De-

Emerging markets offer plenty of promise, but you'd better know when to buy—and when to bolt

veloping Markets A, a respected pioneer among emerging-market funds, at the end of 1998. Through Aug. 30, you'd be up a tidy 25.34% in 1999, beating the Standard & Poor's 500-stock index by nearly 17 percentage points. But if you were a long-term investor in the fund, you'd be wondering why you'd ever bothered buying in. Its average annual return over the past three years

has been a meager 0.05%, vs. 28.65% for the S&P. Over five years, its average annual return has been only 0.93%, 24 percentage points less than the U.S. index. If you adjust the fund's returns to highlight the extra risk in emerging markets' extreme volatility, the comparison grows even worse.

BIG DROP. You need to be a sharp-eyed trader in emerging markets partly because corporate fundamentals can be less important than local economic and political conditions. But even pros have gotten badly burned. Conservative investors have gotten the message that emerging markets are tough going. The amount of money flowing to such markets from pension

funds and other institutional investors fell to \$1.6 billion in 1998 from \$3 billion in 1997, and to just \$0.6 billion through this summer, according to Eager Manager Advisory Services, a firm in Louisville, Ky., that tracks institutional money flows.

More than ever, therefore, investors must be choosy. Although emerging markets in the past often moved as a group, they now increasingly chart their own courses. Widely varying economic programs and political agendas are dictating sharply different market performances. For example, even as some Latin American markets

Special Report

GLOBAL INVESTING

Corporate performance is often upstaged by the political drama in emerging markets

struggle with recession and political uncertainty, many Asian markets are rocketing higher. "International investors need to be more discriminating," says W. Travis Selmier II, a portfolio manager with USAA Investment Management Co., a San Antonio-based money-management firm serving U.S. military personnel.

Access to the emerging markets has gotten easier in the past several years. Many large companies list American depositary receipts on U.S. markets, and so-called global depositary receipts often trade on major European exchanges. For less widely traded stocks, investors need to contact specialist firms or brokers who can obtain shares for them in local markets. Of course,

ket share in China and is trading at just slightly more than its book value. "It's a play on middle-class consumption," says Angus J. Tulloch, an Edinburgh-based portfolio manager with the \$4.8 billion mutual-fund partnership Babson Stewart Ivory International.

Winning in the more volatile markets means keeping a close eye on local conditions. For example, some Indian stocks may seem like bargains—even after the market soared this year. But India's worsening military tensions with Pakistan and its high fiscal deficits are prompting investors to steer clear. By contrast, stocks in South Korea are likely to keep surging despite saber-rattling by the North. Few analysts believe that Korea's problems with its neighbor will really threaten the reviving country.

Still, with growth just now accelerating, Korea's economic rebirth has a ways to go. Industrial production is rebounding at a 25% annual rate. But economist Robert M. McKee of London investment consultancy Independent Strategy Group says the economy is still moving out of the deep trough just over a year ago. As the economy builds momentum, companies that feed rising domestic demand or Western export markets—such as H&CB bank, Samsung Electronics, Daewoo Iron & Steel, Korea Telecom, and Daeduck Electronics—are high on many money-manager lists.

LATIN BARGAINS. Even treacherous times can spell opportunities in some emerging markets. Much of Latin America, for instance, is mired in recession. The weakening of the U.S.

dollar against the yen and euro is bad for Latin economies tied to greenbacks. And widening spreads over U.S. Treasury bonds for emerging market debt (page 86) reflect increasing political uncertainty about the region. Ecuador recently announced it would postpone payment on Brady bonds for 30 days. And in Venezuela, ultra-left-wing President Hugo Chavez is winning over voters to the idea that the country should defy the International Monetary Fund's recommendations for fiscal austerity.

But such factors are combining to make many Latin American stocks bargains. "Some of the values on these stocks are incredible," says Felicia Morrow, a portfolio manager with Emerging Markets Investors Corp. of Arlington, Va. Among her picks: Grupo Financiero Banorte, a well-run retail bank that is trading below book value.

Special Report

GLOBAL INVESTING

this may force you to put up with hassles, including currency conversion and corporate disclosure documents in local languages. An easier way is to buy shares in mutual funds that focus on emerging-market stocks. Matthews Korea Fund, for instance, is up 87.5% so far this year, mirroring the broad recovery in Asian markets.

For the coming year, at least, Asia continues to look like a smart bet, even though markets are not moving in sync. While South Korean stocks have soared on hopes that the government has finally stopped propping up the inefficient *chaebol*, political instability has clouded Indonesia's markets.

Sheila H. Coco, who manages institutional global equity accounts at Fiduciary Trust Co. in New York, thinks Asia, including China, should grow by 4% over the next year or so, with corporate earnings rising 15%. While high valuations in many Asian markets indicate "a lot of good news has already been factored in," Coco says, there still are companies that can "surprise you on the upside." She cites Development Bank of Singapore, which recently delivered higher-than-expected earnings for the first half.

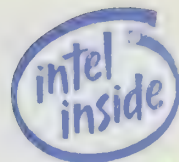
CHINA PLAY. Even in up-beat markets, it pays to be picky. Worried that valuations of many Hong Kong stocks may be outstripping the tepid economy, some analysts urge investors to stick with companies tied to growth in mainland China. One example is Guangdong Kelon Electrical Holding Co., a refrigerator maker that boasts the top mar-

A Shopping List for Intrepid Investors

COMPANY/ COUNTRY	STOCK PRICE** DOLLARS	PRICE-EARNINGS RATIO
ASIA		
DEVELOPMENT BANK OF SINGAPORE*	\$45	61.82
GUANGDONG KELON ELECTRICAL HOLDING Hong Kong	1	11.29
POHANG IRON & STEEL Korea*	36	17.69
SAMSUNG ELECTRONICS Korea	34	81.59
EMERGING EUROPE		
ELEKTRIM Poland	12	673.33
GEDEON RICHTER Hungary	50	14.64
ORBIS HOTEL GROUP Poland	8	17.90
LATIN AMERICA		
GRUPO FINANCIERO BANORTE Mexico	1.20	15
COCA-COLA FEMSA Mexico	1.50	21.06
MASISA Chile*	10	10.22
DISTRIBUCION Y SERVICIO Chile	16	30.20
MIDEAST AND AFRICA		
ECI TELECOM Israel	28	11.93
AL-AHRAM BEVERAGES Egypt	31	10
PROFURN South Africa	75	13.83
PALABORA* South Africa	8	0.06

*American depositary receipts **As of Aug. 30

DATA: BUSINESS WEEK, BLOOMBERG FINANCIAL MARKETS



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UNSAFE HANDS?

Investors got nervous over the ultra-left-wing, anti-IMF policies of Venezuelan President Hugo Chavez

tral European countries depended on Russia, where political uncertainty is on the rise again amid a widening money-laundering scandal. Now, the region's economies are with Western Europe, where economies are recovering. That bodes well for the new euro bloc's fast-growing satellites. Elektrim, a Polish telecom company run by American Barbara Lundberg, is likely to gain as cellular phone use grows in Poland

because of general anxiety over Mexican bank management. She's also bullish on Masisa, a Chilean particle-board maker whose business is thriving but whose stock is trading at just 12 times expected 2000 earnings.

Now that the prices of many commodities are rising, some Latin American countries that depend on oil, gas, and various minerals should see their markets improve. Rising copper

Special Report

GLOBAL INVESTING

prices may help Chile overcome some of its toughest economic times in decades, for instance. So some money managers, betting on a recovery there, are high on bank stocks such as Banco Edwards and Banco Santiago, and retail plays, such as Distribucion y Servicio, a chain that is expected to thrive as consumption improves.

MATERIALS GAIN. Still, commodity prices aren't the only thing influencing stocks. While the South African market may be weighed down by the slide in gold prices, other factors are more important in tracking local stock performances. Furniture-maker Profurn Ltd., for one, is high on USAA money manager Selmier's list because it is aiming at lower- and middle-income consumers in growing parts of eastern and southern Africa. And Bernard R. Horn Jr., who runs global value fund Polaris Capital Management Inc., is thrilled at the cheapness of paper maker SAPY Ltd. and copper miner Palabor—both plays on what he considers to be an undervalued basic-materials sector.

During the cold war, the fortunes of Eastern and Cen-

tral European countries depended on Russia, where political uncertainty is on the rise again amid a widening money-laundering scandal. Now, the region's economies are with Western Europe, where economies are recovering. That bodes well for the new euro bloc's fast-growing satellites. Elektrim, a Polish telecom company run by American Barbara Lundberg, is likely to gain as cellular phone use grows in Poland

where fewer than 10% of the population have cell phones compared with 30% in France. Another intriguing Polish play is the Orbis Hotels group, which holds the premier urban sites and dominates the hospitality market. And in Hungary, Babson-Stewart money manager Stuart W. Paul likes regional pharmaceutical supplier Gedeon Richter Ltd., the leading purveyor of generic drugs to the former East bloc. For investors with a strong stomach for risk, improving peace prospects in the Middle East may mean lucrative opportunities. Israeli outfits such as ECI Telecom, a dynamic caterer to the country's fast-growing communications sector, is exciting many money managers. And in Egypt, Paul is intrigued with Al-Ahram Beverages, a nonalcoholic beer and wine supplier that wants to cater to the entire Muslim world and is trading at only around 10 times next year's expected earnings. Beware of being seduced by such exotic little bargains, though. Emerging markets are full of companies with the potential to offer investors outsized rewards. But before you invest, remember that they also carry outsized risks.

By Joseph Weber in Toronto
with Joan Warner in New York

ON A ROLL

Stocks of South Korean companies like Pohang are rising on hopes Seoul will cease propping up inefficient *chaebol*



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MOTOROLA EMBEDDED SOLUTIONS

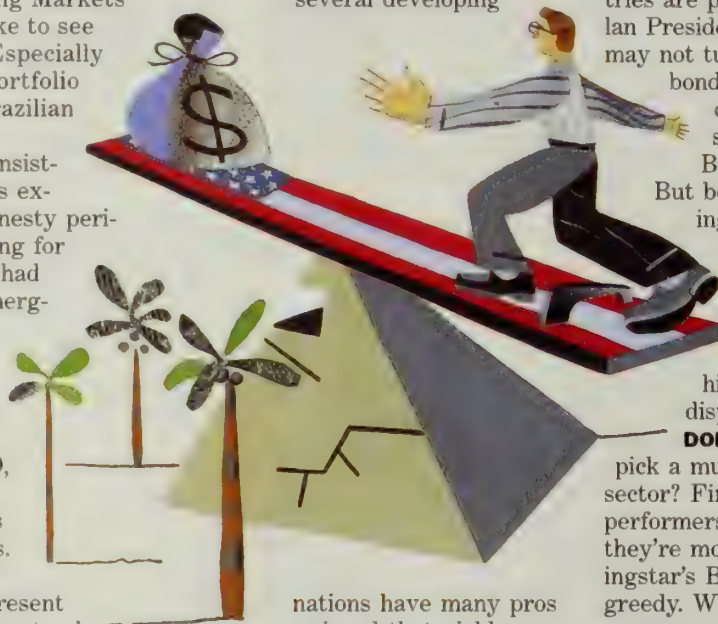
THESE BOND FUNDS REQUIRE A STRONG STOMACH

Last April, as Michael J. Conelius was driving through São Paulo, he saw a crowd in front of a bank. "I thought, oh God, what now?" recalls the portfolio manager of T. Rowe Price Emerging Markets Bond fund. "You never like to see lines in front of banks." Especially when your \$165 million portfolio contains \$25 million in Brazilian debt.

Fortunately, the line consisted of delinquent taxpayers exploiting a government amnesty period, not depositors clamoring for cash. But Conelius, who's had many scares managing emerging-market bonds, knows he'll have lots more. Ever since a nearly broke Mexico issued the first Brady bond after restructuring its loans in '89, emerging countries' debt has been only slightly less volatile than their equities.

As a result, these high-yielding bonds should represent only a small fraction of investors' portfolios, says Sarah Bush, an emerging-markets bond-fund analyst at Morningstar Inc. in Chicago. "These may be bond funds, but they aren't low-risk," she says. That's why their yields are, on average, six per-

Markets Bond Index and U.S. Treasury bonds widened from less than 6 percentage points at the end of July to nearly 17 by Sept. 10. But recently, improving economic conditions in several developing



nations have many pros convinced that yields are again making the risks worthwhile. Dollar-denominated Russian debt, for example, is up by more than 100% year to date in value, though still off 50% in the past 12 months. And with Brazil's economy expected to shrink by only 1% this year, its bonds are up 16%. "There are plenty of good buying opportunities," says John Carlson, manager of Fidelity New Markets Income Fund, which delivered a 15.28% total return through July 31 this year after losing 22% in 1998. These days, Carlson favors improving credits such as Mexico and Malaysia.

If you have a high tolerance for

risk and are considering an emerging market debt fund, remember that few other asset classes confront the investor with so many variables. The biggest concerns in developing countries are political. Populist Venezuelan President Hugo Chavez Frias may not turn out to be benevolent to bondholders. And Ecuador recently announced it would suspend payment on its Brady bonds for 30 days. But besides country risk, emerging-market debt exposes investors to interest-rate gyrations even more than other bonds do.

That's because rate hikes in the U.S. tend to hit the emerging markets disproportionately hard.

DON'T BE GREEDY. How do you pick a mutual fund in this volatile sector? First, avoid the latest top performers. "It probably means they're more risky," says Morningstar's Bush. Second, don't be greedy. While many fund managers say emerging-market bonds offer long-term value, they change direction so violently that it can take years to recoup losses. Be willing to take profits and get out while the getting is good.

It's unlikely that emerging-market bonds will recoup last year's losses by the end of 1999. Investors fled the market after the Russian default—as they did with emerging-market stocks. And Wall Street's trading desks and hedge funds have yet to venture back. "Trading volume is about a fifth of what it was," says J.P. Morgan & Co. analyst Jose Luis Daza. Since jitters about Y2K crises are worse in emerging economies than in the U.S., the liquidity crunch isn't likely to ease anytime soon.

Nonetheless, Morgan's Daza is recommending Mexican and Argentine bonds to his clients. "I see a lot of potential for a rally next year," he says. Maybe so, but if you're looking to buy into an emerging-market bond fund, be prepared for a wild ride.

By Andrew Osterland
in Chicago

Special Report

GLOBAL INVESTING

centage points higher than U.S. corporate junk bonds. So returns can be fabulous—provided your bonds' value doesn't shrink.

But, of course, things regularly go awry. Indeed, after last year's emerging-markets debt crash, you need a cast-iron stomach to even consider buying into these bond funds. The average total return of the 21 open-end funds Morningstar tracks was -25% in 1998.

Most of the bloodbath occurred in the weeks after Russia's debt default, when the spread in yields between the J.P. Morgan Emerging

Honey, I Shrank the Assets

FUND NAME	ASSETS (MILLIONS OF DOLLARS)	YEAR TO DATE	TOTAL RETURN (PERCENT)*	
			12 MOS.	3 YRS. ANNUALIZED
FIDELITY NEW MKTS. INCOME	\$208.4	15.28%	-10.34%	8.93%
SCUDDER EM. MKTS. INCOME	193.7	7.50	-21.28	-0.76
T. ROWE PRICE EM. MKTS. BOND	167.9	6.32	-16.52	4.86
VAN KAMPEN WLDWD. HIGH INCOME A	56.4	6.16	-13.00	5.46
AIM EM. MKTS. DEBT A	55.8	5.73	-20.70	0.10

*Through July 31

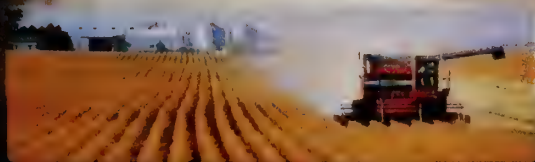
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BusinessWeek

THE RESOURCE FOR ENTREPRENEUR

Frontier

How to get
the right
system

**Plugged
In**

Why more small
companies are building
networks. Why you
should, too.

How to
make small
networks
pay off big

How to
avoid getting
hacked to bits
by hackers

things to l
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Diary: A wry chronicle of one
entrepreneur's struggle to build his
business

WEDNESDAY

IT Manager: How to get the
out of your technology
that spending a fortune

THURSDAY

Work & Family: Azriela Jaffe helps
manage conflicts between your
business and personal lives

FRIDAY

Net Answers: Ask us anything
about running your company; we'll
get an answer from top experts

SATURDAY

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sellers for entrepreneurs

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online loan searches, and a start-
up guide for budding entrepreneurs.
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daily E-mail newsletter. Send
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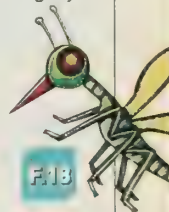
Fun is fundamental at IDEO, says CEO Dave Edley

F.16 Keeping Score

Two startups in the online-postage business take on mighty Pitney Bowes

F.18 Digital Manager

Think your business is too small for hackers to bother with? Think again



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How using outside consultants—and listening to the workers—kept a union at bay

F.50 Under 30

Julie Cusumano's blueprint for Castle Contracting: Think small, bid smart, and network

Cover illustration:
Francisco Caceres

EDITED BY DENNIS BERMAN

Happy Y2K? Well...

IT'S TOUGH ENOUGH to ask employees to work week-ends. You may soon have to ask for a far bigger sacrifice: that some of them spend New Year's 2000 at the office. A few tips for staffing during the millennium:

PLAN EARLY. Some New Year's arrangements have been in the works for years. As soon as possible, break the news that you need help and hope you don't spoil any plans.

PAY WELL. What's worth missing the biggest party of the past 1,000 years? At least three times wages, recommends Anthony Mulkern, a Glendale (Calif.) human-resources adviser to high-tech businesses.

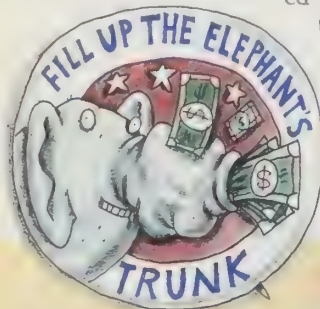
SHOW APPRECIATION. Design commemorative T-shirts. Feature your New Year's team in the company newsletter. Throw an on-site party.



SET AN EXAMPLE. Absentee bosses don't inspire loyalty. At the least, carry a cell phone or beeper so employees can reach you on Dec. 31. "I'm always on call, not just for Y2K," says Shao Yuan Hsueh, president of Lisle (Ill.) data-base firm Leapfrog Technologies Inc.

From Whiteboard to PC—and the Net

TURN JOTS into bits and bytes by digitally recording notes from those handy whiteboards used for brainstorming. Virtual Ink Corp.'s \$499 portable mimio attaches to a whiteboard or flipchart. Just slip standard markers into color-coded jackets, which emit radio waves that save the notes as PC files (617 623-8387, www.virtual-ink.com). MTSI's \$599 ibid 50 uses a touch-sensitive 1-ft. x 2-ft. whiteboard. An add-on lets remote users view notes live on the Net. (888 388-4243, www.microtouch.com).



Fat Cat Etiquette

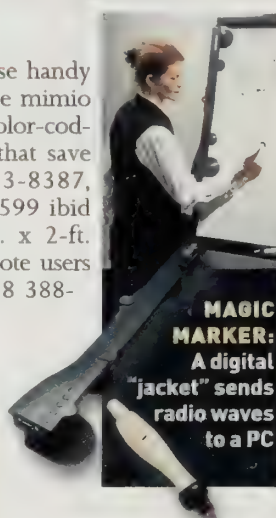
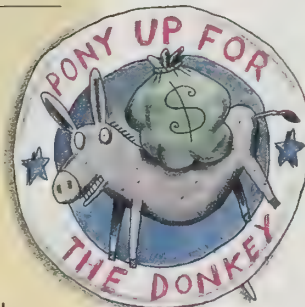
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- Solicit executives, administrative personnel, and stockholders—but not rank-and-file employees—for a particular candidate

YOU CAN'T:

- Reimburse employees for contributions
- Give candidates funds directly from the business (unless it's through the company's registered PAC)
- Contribute in the name of another person—say, a child



A DSL Dictionary

FAR. FAST. CHEAP. Phone companies across the country are pushing digital-subscriber lines (DSL) to small businesses that want super-quick Net connections. What are they talking about?

DSL Uses high frequencies transmitted across regular phone lines to send data to your PC up to 126 times faster than via 56K modems.

Mbps Megabits per second is the way Net speeds are measured. Shakespeare's entire works take up 5 megabits.

ADSL Asynchronous DSL. The most common "flavor" of DSL, which allows data to be downloaded about 10 times faster than you send it from your end.

Splitter A small device, necessary for DSL, that attaches to your phone line and splits the data and voice components.

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No Place Like Home?

LIKE THE ODYSSEY'S SIRENS, state and local economic development agencies entice businesses to their lands with tax breaks, cheap labor, and a better way of life. But for all the entreaties, hardly any outfits relocate from one state to another—just 0.3% of U.S. companies from 1996 to

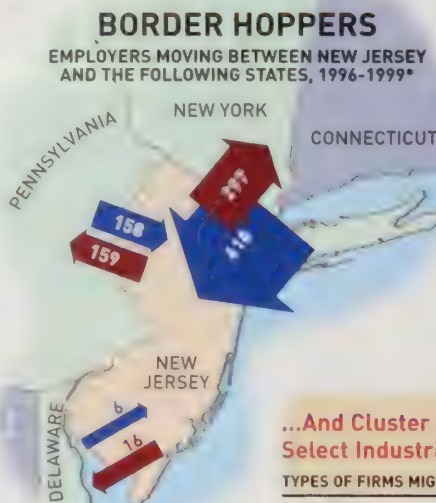
Most Movers Have Matured

AGE OF FIRMS MIGRATING*

3 YEARS	10%
-5	11
-10	24
1-15	16
6-20	10
1>	16
UNKNOWN	13

*Companies with 50 or more employees

1999, says a study for *frontier* by Brandow Co., a research firm in Camp Hill, Pa. (bizminer.com). True, that's 16,728 companies with more than 517,000 jobs. Companies with fewer than 50 employees represented 86% of movers—and 23% of relocated employees. But many are less mobile than they look, says Jon Brandow, since most moved within interstate metropolitan areas—say, from New York to New Jersey (map). Perhaps, then, the sirens should sing a different tune. "The focus on business migrations is vastly overblown," Brandow says. "Should we help the 3.2 million businesses that failed between 1996 and 1999, or the 17,000 that moved?"



...And Cluster in Select Industries

TYPES OF FIRMS MIGRATING*

SERVICES	32%
WHOLESALE	18
MANUFACTURING	16
RETAIL	10
FINANCE, REAL ESTATE, INSURANCE	9
CONSTRUCTION	7
OTHER	8

*Companies with less than 50 employees

SO THEY SAY

"They all probably thought I was the biggest witch in the state"

—DEB McALISTER, Dallas PR exec, on how her service providers perceived her in the midst of a crippling computer-network failure (page F.22)

18.3%

Percentage of federal contracts over \$25,000 awarded to small businesses in '98. The stated goal was 23%

ONE IOTA

Sharing the Wealth While Keeping Control

As a partner at Family Wealth Advisors in Springfield, Mass., Charles Epstein frequently advises family-owned businesses on how to spread the wealth to nonfamily employees without losing control of the firm.

Q: What incentives can a family business create?

A: Set up a phantom-stock plan tied to the growth of the business that can be cashed out at retirement. Or buy life insurance that accumulates cash until retirement.

Q: How do these differ from tra-

ditional deferred-compensation plans?

A: In a phantom-stock plan, the company may pre-fund the investment and earmark that money immediately, thus reducing risk if the company goes under. It's greater peace of mind.

Q: How much red tape can you expect with these plans?

A: There's little to no filing with the Internal Revenue Service—which is not the case with profit-sharing arrangements. You can be as creative as you want.



EPSTEIN: Finding "peace of mind"

Sticky E-Stamps

Electronically sold postage is scheduled to become available nationally this month, and it seems simple: Go to a Web site, fork over a credit card, and print out all the E-postage you need. New services such as E-stamp and Stamps.com can save hours of frustrating waiting on line (the physical kind). But they're not as easy as a single mouse click: First, you'll have to download special Zip-Code software that creates your letter's electronic bar code. What's more, envelopes have to be addressed and stamped simultaneously, which means you can't easily use E-postage on preprinted mail, such as utility bills. Our advice: Don't throw out that postage meter just yet. For more see page 16.

The Venture Boom

Pennies keep falling from heaven. Lots of them, according to PricewaterhouseCoopers' MoneyTree, a quarterly survey of venture-capital firms. In the first six months of 1999, vcs invested nearly \$12 billion in 1,714 young companies, which nearly matches the \$14.3 billion they ponied up during all of 1998. The biggest winners? Technology companies, naturally, which garnered 90% of all vc dollars.

Why Buy Their Home PCs?

It sounds crazy for employers to pay for telecommuters' computers if workers already have Net hookups at home. But at today's low prices, reports *frontier's* Jeremy Kuttner, there's good reason to insist on it. First, you'll have the legal right to mandate what employees do with the equipment, which should discourage moonlighting and potentially dangerous meddling and hacking from their kids. And standardizing your telecommuting gear should cut downtime and repair costs, too.



For the full stories, click Online Extras at frontier.businessweek.com



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\$2299¹

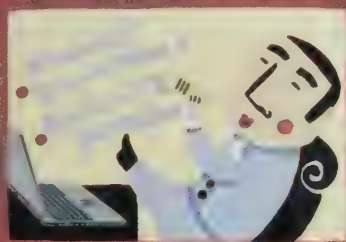
Houston, we have detached the Bay...



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way thin!

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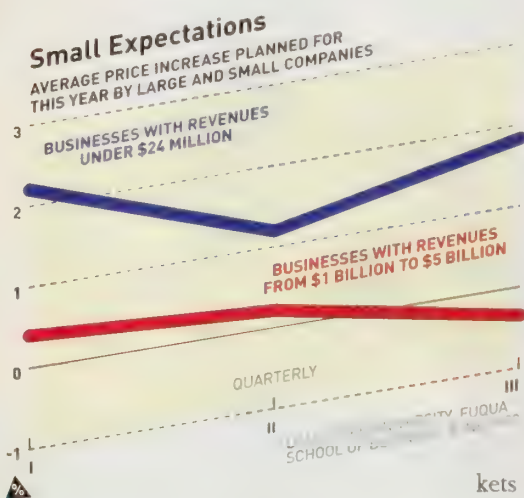


Before You Raise Prices...

CURRENTS

Some small businesses can afford to—but not all

SURE, YOU'D LIKE to raise your prices. But in today's zero-inflation economy, companies are finding it tough to squeeze an extra dime out of their customers. Consider a June survey of 321 companies by Duke University's Fuqua School of Business, which found that small businesses with less than \$24 million in revenues expect to boost prices an average of 1.8% this year—nearly half a percent less than they had hoped back in January.



That may not sound great, but it is better than the Goliaths are doing. In fact, large companies with sales in the \$1 billion to \$5 billion range actually expect to lower prices an average of 0.35%. What gives the entrepreneurs an edge? "Small businesses typically specialize in products that aren't available in the broader market," explains Saul Reebstein, a managing partner and specialist in small business at BDO Seidman, an accounting and man-

agement consulting firm. "So in times of stable markets, they have the ability to raise prices more than mass merchants."

Of course, not every small business operates in a narrow niche. So how do you know if you can risk a price hike? First, check your competitors. If you're in a tight sector, such as retail, chances are you don't have much wiggle room. What about consultants and other service-oriented businesses? "If you're highly valued by your customers, you can go ask them to pay more," says Doug Reynolds, a senior technical assurance manager with accounting and consulting firm Grant Thornton LLP.

Technology & Business Integrators, an information-technology consulting firm with 80 employees in Woodcliff Lake, N.J., recently boosted its fees—still below its big competitor, PricewaterhouseCoopers. So far, clients haven't complained. "But you have to really, really, really deliver service," says CEO Stan Goldman. Another plus for small businesses: They have more ability to penetrate new mar-

kets than large players do. And according to Mark A. Stiving, a pricing researcher and professor of marketing at Ohio State University's Fisher College of Business, "They tend to move in an upscale direction." In other words, as small businesses grow, they get what every company wants: customers with fatter wallets.

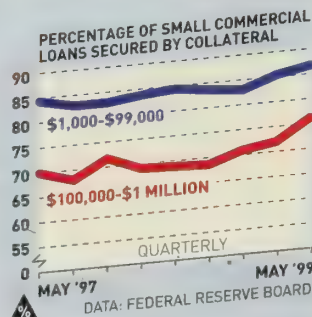
—KAREN CHENEY



Review past trends in pricing power. Click Online Extras at frontier.businessweek.com

False Insecurity

On the surface, it looks like bad news for borrowers: Banks are requiring collateral for more loans under \$1 million than at any time since early 1997, according to Federal Reserve Board data. Turns out this may actually signal eased standards, says Ann Grochala, director of bank operations at the Independent Community Bankers Assn. Fierce competition means less creditworthy entrepreneurs get financing. "Bankers are stretching to make loans they weren't comfortable with before," says Grochala. "But they still want a little protection."



A Fee for Free Service?

The Service Corps of Retired Executives (SCORE), known for helping out cash-strapped entrepreneurs with free advice from former business leaders, is having cash flow problems of its own. And that could force SCORE chapters to charge for some of their most popular free programs.

Each year, Congress doles out \$5 million to the group's 389 chapters, staffed by ex-executives who dispense wisdom to entrepreneurs. The Small Business Administration has typically helped pay for administrative expenses, such as travel, photocopying, and advertising. Now, it seems, the SBA can't ante up its latest \$400,000 chunk. The agency argues that the funding is discretionary and that it needs the money to cover basic operations.

SCORE reps at one Miami chapter are already bemoaning the fact that they'll have to start charging fees to cover the shortfall. "We have free seminars three times a month that draw 60-70 people," says Dade County-area Chairman Louis Garcia. "If we start charging, it's going to get down to 15 or 20."

A Classier New System

Say *sayonara* to the government's outmoded Standard Industrial Classification (SIC) code, which lumped together vast, unrelated industries into similar categories. Now, when you're benchmarking your company against its peers, you'll use the new North American Industry Classification System (NAICS), pronounced "nakes," which debuts this fall in the latest data from the U.S. Census Bureau's Economic Census. It's available on the Web at www.census.gov/naics. There, you can track your old SIC code's new NAIC equivalent. The new system streamlines old categories while adding 350 new industries (say farewell to the women's blouses category and hello to cell phones).

—DENNIS BERMAN

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A Lucky Break

A knee injury ended Timothy Childs' pro ball aspirations, so he tackled chip making instead



A MAN WITH A NEW PLAN: Childs expects TLC Precision Wafer Technology to have sales of \$100 million within five years

EVERY CAREER HAS its pivotal moment. For college football star and math whiz Timothy Childs, it was a knee injury that led him to pursue a PhD in physics instead of chasing his dream of joining the San Francisco 49ers. Today, he's CEO of Minneapolis-based TLC Precision Wafer Technology Inc., a still tiny but well-positioned player in the burgeoning \$2 billion market for gallium arsenide wafers and chips—superfast chips that are

years. So far, he's raised about \$3 million out of \$8 million he needs to get there.

To be sure, Minneapolis is a long way from Silicon Valley. But TLC benefits from lower living costs and proximity to research facilities at the University of Minnesota. And Childs, who grew up on welfare in Miami, regularly taps the inner-city labor pool, which he calls an unrecognized resource in a region with a strong work ethic. "Beyond the temperature, it's a no-brainer," he says.

That pragmatism surfaced early in his life. As a kid, Childs used to buy up candy during the week and sell it to the neighborhood kids on Sunday, when stores were closed—at double the price. As a student at Florida A&M on a football scholarship, he worked summers at AT&T Bell Labs in New Jersey. When he chose Stanford University to study physics, with AT&T footing the bill, he still dreamed of the nearby 49ers. "I still wish I could have played for the 49ers," he says wistfully. But all the same, Childs has the ball and is running with it. —ANDREW HAEG



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more resilient than silicon ones and can carry higher-frequency signals. Now, he's butting heads with big-budgeted players like TRW and Daimler-Benz Aerospace.

Demand for these computer chips is expected to quintuple over the next seven years for use in automotive radar, satellite communications, and other applications. That's fertile turf for Childs, who led a gallium arsenide

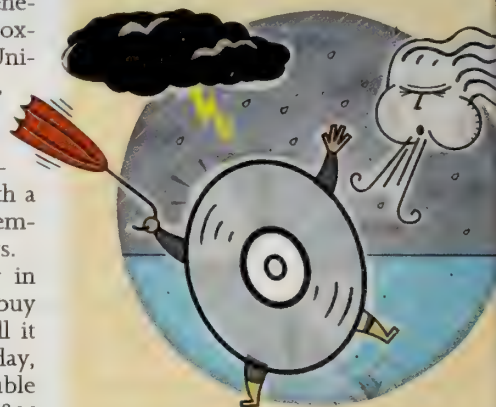
INSTANT EXPERT

Natural Disasters

The Facts More than 30% of small businesses shut down by natural disasters never reopen, according to the Federal Emergency Management Agency (FEMA). The reason? They can't get back in business fast enough. A key problem: damaged computer systems and the loss of critical data.

Case in Point Simmons Advertising's office in Grand Forks, N.D., suffered over \$300,000 in damage while submerged under 4½ feet of water during the flood of 1997. Simmons sent mud- and grit-filled hard drives to data-recovery specialists but ultimately lost half the information. The firm has since moved to higher ground and now stores their backup data 90 miles away.

Getting Prepared Assess your risk and plan for emergencies with the "Emergency Management Guide for Business and Industry" from the FEMA Web site, www.fema.gov.



For free information and custom research on data protection and other disaster-related issues contact the Institute for Business & Home Safety, 617 292-2003, www.ibhs.org.

Steps for Y2K contingency planning apply to general data protection as well. Get the Y2K Jumpstart Kit at the Y2K Help Center for Small Business (y2khelp.nist.gov), 800 Y2K-7557.

For links to data storage services, check out the Disaster Recovery Journal's Web site, www.drj.com.

A photograph of Maria Barraza, a woman with short dark hair, wearing a dark blue long-sleeved top. She is leaning over a dark wooden table in a workshop. On the table are various sewing tools, including a spool of blue thread and a pair of scissors. In the background, there are several mannequins wearing different styles of coats, including a red one on the left and dark blue ones on the right. The room has large windows and a wooden floor.

hand pick the buttons on my coats. I'm not about to leave my cash flow to just anybody."

Maria Barraza
Designer, Owner of Barraza New York
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Do It Yourself

**Self-insurance can save on health-care costs
—and it's probably less risky than you think**

SICK WITH WORRY about health-insurance costs? You might find a remedy in self-insurance, in which your company, rather than an insurer, pays medical claims directly. Too risky? Not necessarily. You can limit your liability with a low-cost policy that covers only catastrophic illness.

This option, once nearly unthinkable for small employers, is gaining popularity as double-digit premium hikes return for fully insured plans. "Self-insurance for companies with 25 to 50 employees is the fastest-growing segment of my business, up

You pay after expenses are incurred rather than prepaying with premiums. Fixed costs can be cut 35% to 65% and total payout by about 15%.

To self-insure as a small employer, you'll need two partners: a third-party administrator (TPA) and a stop-loss insurer. The TPA will find your company a health-care network—usually, a preferred provider organization (PPO)—and process claims. The stop-loss insurer will recommend how much to put aside each month, and its coverage kicks in only if claims exceed the stop-loss limit that you've chosen.

To set up a self-funded plan, first find a TPA familiar with small businesses. Brokers aren't likely to help—buying just stop-loss slices commissions by as much as 50%—so get a list from the nonprofit Self-Insurance Institute of America, Inc. (800 851-7789). Most TPAs will help you select a stop-loss insurer.

Even the smallest company can self-insure, but without consistent cash flow, "one sick employee can throw your balance sheet out of whack," warns Larry Levitt of health-policy think tank Henry J. Kaiser Family Foundation. And don't consider it if the majority of your workers aren't in relatively good health. Too many small claims could be catastrophic—for you, anyway.

—JOSHUA KENDALL



For details on setting up a self-insured plan, click Online Extras at frontier.businessweek.com



about 30% over the past 18 months," says Curtis R. Donley, a benefits consultant in Indianapolis. For large employers, it's nothing new. In 1997, 60% of companies with more than 500 employees self-insured, compared with just 3% of those with fewer than 50, according to a recent study in the policy journal *Health Affairs*. A key attraction: control over expenditures. Since these plans are governed by looser federal law, state mandates for specific benefits don't apply. Employers can tailor a plan to their workforce—excluding childbirth, say, for an all-male group. They are also exempt from the 2% to 3% state tax on premiums. Improved cash flow is another advantage.

SMART ANSWERS

Q: My startup E-commerce company wants to establish a virtual shopping mall with a group of local retailers. Can we compete online with Gap, Macy's, and Nordstrom?

—C.L., Los Angeles

A: Many local retailers' hopes were stunted by a recent study predicting their online market share would shrink from 9% to about 6% by 2003. Face it: Most small retailers lack brand recognition and they can't fund fancy, interactive sites.

However, E-mails can help small retailers get their products on the Web by charging a monthly rental fee or a percentage of online revenues. Collectively, they gain marketing power and increased Web traffic.

Make sure your collaborators share a common vision, commit for a specified duration, and make equal funding contributions or pay the same "rent," says Karen Glotzer, strategic alliance manager for SmallOffice.com in New York, an online resource for entrepreneurs serving the small-office market.

You'll need to find a marketing niche appealing to a segment such as teens or working moms. Online malls lose customers if they don't provide technical support and don't give consumers reasons to return, says Evie Black Dykema, an analyst at technology research firm Forrester Research Inc. Perhaps you can negotiate online discounts or let shoppers purchase everything in one transaction.

"You may have to be innovative and contemplative—but you can still compete," says Jonathan B. Spira, founder of Basex Group, Inc., a new technology research firm in New York. In other words, you may not be landsend.com, but you don't have to let the E-giants get you down.

—KAREN E. KLEIN



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Seriously Silly

Freedom to play breeds innovation—and productivity. Just ask the founder and CEO of IDEO

AT FABLED product-design company IDEO, acting goofy is all in a day's work. Employees play miniature golf and toss Nerf balls in the hallways and race desk chairs in the street outside the company's Palo Alto (Calif.) headquarters.

Isn't "fun workplace" a bit of an oxymoron? Not to David M. Kelley, CEO and founder of the now-350-employee business. He thinks play ignites the innovative spirit. With more than 3,000 products under IDEO's belt over two decades—including Apple Computer Inc.'s first mouse and a stand-up toothpaste tube for Crest—Kelley is clearly on to something.

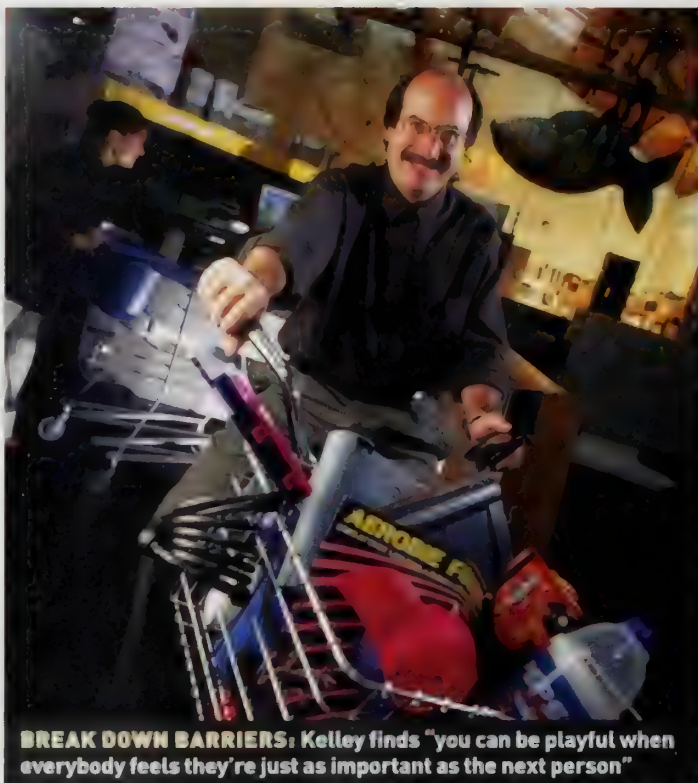
These days, Kelley, who teaches at Stanford University's Product Design Program and consults on innovation to companies large and small, wants to invent thinkers, not just products. Kelley talked to reporter Charles Butler about creative culture and how small fry can exploit their freer, less rule-driven environment to foster innovation.

Q: When do you know if a company has an innovative culture?

A: In a creative culture, everybody feels comfortable speaking up, even in front of the president. In a hierarchical, non-creative company, everybody feels afraid and waits to see what side the president or senior management comes down on. Big ideas happen when people build on each other's ideas.

Q: Why is having fun so important?

A: It's all in the breakdown of barriers of who's important in the company. You can be playful when everybody feels they're just as important as the next person. The reason you're not throwing a Nerf ball around at IBM is not that you're not playful; it's fear of retribution from somebody higher up. So if you can break down that barrier, everybody not only feels comfortable throwing the Nerf



BREAK DOWN BARRIERS: Kelley finds "you can be playful when everybody feels they're just as important as the next person"

ball but coming up with ideas.

Q: But how can you funnel playfulness into productivity?

A: For us, a good day is when we have what we call "brainstormers," and in our culture, the highest form of status is being invited to a lot of brainstormers. That means people value you. The fun part is that you've been invited to give ideas even if it's not your client or project.

Q: How can office design help create a team atmosphere?

A: Most companies put people in individual offices, and if there's any space left, they build a conference room. Totally wrong. First, build group space. Every project is important, so why not have a group room where you put the collective stuff the group owns—the material, the information, the prototypes? Then you build offices around it.

Q: Are small businesses more apt to be innovative?

A: For sure. The reason is the rules. They're the biggest deterrent to innovation or creativity. In a small company, you know who's making the rules or you know it's O.K. to break them if you have a good idea. But as small companies get bigger and start making more rules, I recommend that they still let their people feel empowered to break them—or at least question them if they have a special job to do.

Q: These days, everybody seems crazed at work. How can we find the time to be innovative?

A: We call it "busy-itis." It's just a macho thing. Right now, no one can go home and do anything but say: "I'm so busy, I can't keep up." It's a fad. I don't think it's related to creativity. It's a question of who in the company is dedicated as the strategic people. We'll reorganize companies to have

an advance-concept group, which is like R&D, and this is the reason: Everybody who is grinding it out and getting the present product out feels better knowing the company has a vision of the next product.

Q: You recommend making innovations very rapidly. Doesn't that lead to mistakes?

A: The best path to innovation is through what we call enlightened trial-and-error. The day a project starts, make a bunch of crummy prototypes and the next day show them to customers, users and manufacturing. They'll tell you what's wrong. Take copious notes and fix it. Just keep speeding along to finalize what the idea is.

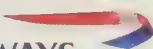
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The 'Big' Question

Three E-postage rivals stamp their feet over who's the real underdog

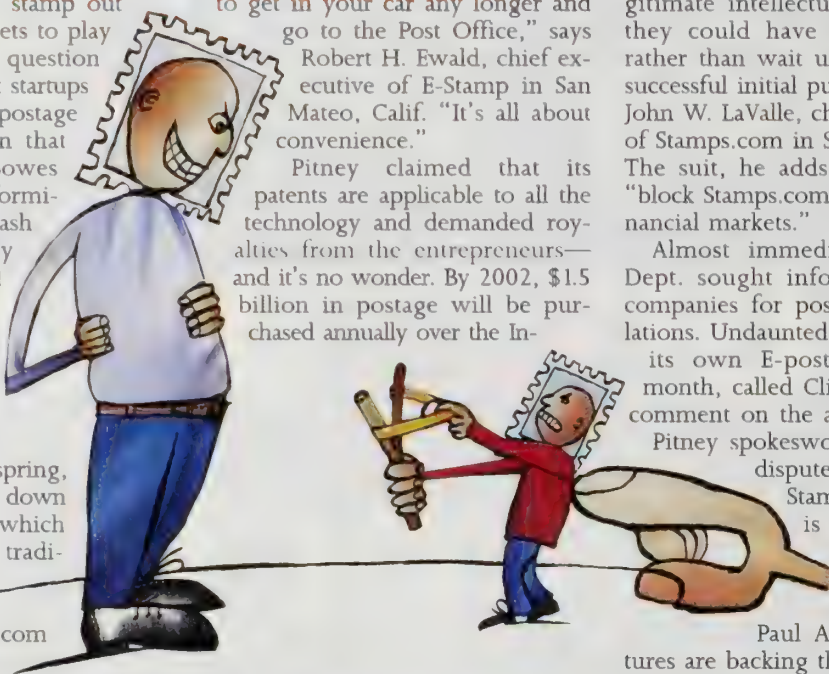
IS GOLIATH TRYING to stamp out David again? And who gets to play the role of David? The question arises as a pair of Internet startups race to enter the online-postage business. They complain that industry giant Pitney Bowes Inc. is trying to use its formidable legal muscle to squash their new ventures by claiming their intellectual property as its own. Nonsense, says Pitney, adding that the upstarts are actually fronting for a crowd of giant competitors.

The fracas began this spring, after licensing talks broke down between Pitney Bowes, which has an 85% share of the traditional postage-meter market, and E-Stamp Corp. and Stamps.com Inc. All three companies have been scrambling to receive approval from the U.S. Postal Service to sell postage over the Internet beginning this month. Although each company employs slightly different methods, the basic technology would allow customers either to download or to go online to purchase postage and then use their own printers to inscribe outgoing mail with official meter stamps (InBox, page F.6). "You won't have

to get in your car any longer and go to the Post Office," says

Robert H. Ewald, chief executive of E-Stamp in San Mateo, Calif. "It's all about convenience."

Pitney claimed that its patents are applicable to all the technology and demanded royalties from the entrepreneurs—and it's no wonder. By 2002, \$1.5 billion in postage will be purchased annually over the In-



By 2002, \$1.5 billion in postage will be sold over the Net. Who'll be raking it in?

ternet, says small-business analyst Raymond Boggs at International Data Corp.

In June, Pitney sued to get its cut, prompting the startups to cry foul. They say the timing was suspect because both startups were seeking important financing. E-Stamp was trying

to secure a private placement, and Stamps.com had just started a road show for its forthcoming initial public offering. "If they wanted to assert legitimate intellectual-property rights, they could have done so in 1998 rather than wait until the eve of our successful initial public offering," says John W. LaValle, chief financial officer of Stamps.com in Santa Monica, Calif. The suit, he adds, was an effort to "block Stamps.com's entry into the financial markets."

Almost immediately, the Justice Dept. sought information from the companies for possible antitrust violations. Undaunted, Pitney announced its own E-postage program last month, called ClickStamp. It has no comment on the antitrust probe. But Pitney spokeswoman Sheryl Battles disputes the idea that the

Stamford (Conn.) giant is picking on small players, noting that Microsoft, AT&T Ventures, and Paul Allen's Vulcan Ventures are backing the startups. Indeed, Microsoft has already named E-Stamp its postage partner for its small-business site. "It's not David and Goliath at all," says Battles.

E-Stamp's Ewald disagrees. "Our revenue this year is zero. What are they? A \$4 billion company? We have fewer people in our whole company than they do in their legal department," he fumes. "This is all about who will have control over what happens in your office—you or a large company?"

Some startups just won't be licked.

—EDWARD R. SILVERMAN

Mickey Muscle

Most entrepreneurs still cling to the lesson they learned in the schoolyard: Make friends with the big kids, and they won't pick on you.

But playing up to giants offers no guarantees—as the now-defunct Children's Broadcasting Corp. learned the hard way. In 1995, five-year-old Children's inked a \$25,000-per-month deal with ABC Radio Networks, which was to recruit affiliates and sell advertising

for Children's Broadcasting's syrupy, kids-only radio format. With ABC's clout, Children's, which at its peak employed 200 people, hoped to expand its 32-station network into a Nickelodeon of radio.

But Walt Disney Co., which bought ABC while it was talking with Children's, soon developed similar plans of its own. It backed out of the contract 10 months after it was signed and launched Radio Disney, a kids' network that pursued the same advertisers.

Children's sued, claiming Disney had stolen trade secrets and broken its contract, driving the young network out of business. Last October, a Minneapolis jury agreed, awarding Children's \$20 million. Sweet victory? Not quite. In January, a federal judge threw out the verdict, ruling the facts couldn't support it. Children's appeal is pending, but for now it has remade itself as a TV-commercial production house where Goliaths are welcome only as clients. —DENNIS BERMAN

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Hacked To Pieces

Think your business is too small to need network security? That's what intruders are counting on



An unprotected Web site is "totally trashed." Cost: Thousands of dollars and a month of misery

YOU'D THINK THAT being small might give you some de facto immunity from hackers. After all, electronic vandals make headlines by penetrating enormous companies, such as BellSouth Corp. and Symantec Corp., or high-profile government departments such as the Pentagon and FBI. Why would they bother with you?

Good question, says Katherine

Gaudette, president of Capetown-Rio Inc. She confronted it herself during a month-long battle against hackers who temporarily knocked her Redmond (Wash.) marketing-communications company off the Web. She has since learned that it's not uncommon for small businesses to get hacked; they're just too embarrassed to talk about it. Gaudette, who specializes in helping small companies look big, is willing to share her story because she hopes that it will help others avoid what her 12-person staff went through.

Her trials began on July 16 with an unexpected phone call at home. Her Internet service was inquiring about an E-mail that confirmed three-year-old Capetown's request to transfer its domain to another company. Say what? "I

RANDOM ACCESS

Need Help Making Friends?

The appeal of a Web-affiliate program is obvious: An army of Net sites helps to hawk your product (*frontier*, June 28). But running such a program is complex. You have to recruit affiliates as well as set up and maintain your Web store.

That's why Mark Monroe, president of Hat Shack, an Atlanta-based chain of 10 retail stores, decided to outsource the whole thing. In the past six months, such companies as Nexchange (www.nexchange.com), Iconomy (www.iconomy.com), and eSaler (www.esaler.com) began offering services that pick up the burdens and costs of rounding up sites where your customers are most likely to be found. Then they develop and maintain stores that are placed directly on each affiliate site—selling cooking equipment, for example, on a food page—without irking the affiliate by drawing away traffic.

"For smaller companies that want to build a Web commerce presence, this is a cost-effective way to get in," says Alan Alper, an analyst with E-commerce market research firm Gomez Advisors Inc. There are no upfront costs to the merchant. The service company splits a commission with the affiliate Web site on every sale. "Whatever we make, we consider it all gravy," says Monroe. After just four months with Nexchange, his hats hang on some 300 sites. His sole responsibility: Ship products as the sales roll in.

—KAREN CHENEY

A New Way to Charge

Give them credit for moxie: Two-year-old Echarge is promising that when its new online payment system debuts next quarter, "the use of Visa and MasterCard online will become obsolete." Instead of repeatedly keying in credit-card numbers that can be intercepted by hackers, consumers would use digital certificates to pay for purchases. Payments would be made by clicking an Echarge icon displayed on participating sites. What's more, Echarge claims it will undercut the merchant processing fee charged by the credit card companies, which typically runs 1% to 2%.

SIEMENS

The new Siemens Gigaset 2420 is more than an amazing cordless phone system. It may be the best deal in communications today.

LINELY EXPANDABLE The 2420 comes with a desk station and one cordless handset. Plug the desk station into a phone jack and you can add even more cordless handsets, without using another phone jack.

2-LINE CAPABILITY Two business lines, two personal lines, or one business and one personal line, whatever you choose.

INTERCOM CAPABILITY Talk between cordless handsets or between handset and desk station without tying outside line.

INTELLIGENT HANDSETS Access the answering machine, see who's calling, who's holding, transfer calls and conference calls with two line operation and without being tied to a desk. No jack required.

CALLER ID, CALL WAITING AND CALLER ID WITH CALL WAITING Know who's calling and who's waiting on both lines.*

DESK STATION The heart of the Gigaset, equipped with features of a Fortune 500 phone system.

DIGITAL ANSWERING MACHINE FOR EACH LINE As professional sounding as expensive voice mail systems, each line can play five different, outgoing messages and record up to 26 minutes.

2.4GHz FREQUENCY This new frequency ensures crystal clear conversations with virtually no interference.

SMART FAX/MODEM PORT Eliminates the need for a separate line.*

ONE JACK OPERATION Plug the desk station into its jack, and that's the last jack you'll ever need. No jack.

CALL LOG Review the names and phone numbers of the last 30 calls received.

DIGITAL DUPLEX SPEAKERPHONE Hands free operation with digital clarity.

ROOM MONITORING CAPABILITY Program a handset to call the desk station or another handset when a predetermined noise level is reached.

THE SIEMENS GIGASET 2420 sounds like a phone system that costs thousands of dollars, but comes with features even they don't have: like cordless handsets, 2.4GHz technology and one jack operation. So you don't have to be a Fortune 500 company to afford an amazing phone system. You just have to be smart.

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STAPLES

didn't ask for my Web site to be moved," she replied.

A two-week tug-of-war followed in which someone made repeated phony requests to transfer the domain. Gaudette squelched each one, but the hacker succeeded on the third try. With visions of porn or worse going up under Capetown's name, she scrambled to regain control, getting it back within 24 hours on July 30. Nevertheless, Gaudette checked and rechecked to make sure the system had a thorough backup as of that day, a Friday. "Something told me they weren't done," she recalls.

She was right. By Monday, Gaudette's site was "totally trashed... they were destroying everything in their path." It took several days to get it back up, using the electronic equivalent of string and chewing gum, in between meetings with police, security consultants, and venture capitalists looking over the company—not to mention running the business. It was not until mid-August that the daily attacks ended. Gaudette says the staff was left exhausted and feeling violated by the hacker's electronic strip search of their professional and personal data.

Looking back, Gaudette says, Capetown's mistake was installing a security system to cover its corporate network while leaving the Web server unprotected. The security company Capetown uses, WatchGuard Technologies Inc. in Seattle, quickly stepped

Had it been an E-commerce site, the attack could have cut off her revenue—a point she drives home to other entrepreneurs who think a low profile protects them from hackers. "I don't know why they pick on us. But they do," she says.

Bill Hancock says he knows. An FBI forensic consultant on network security, he's also executive vice-president of Network-1 Security Solutions Inc. in Dallas. Hancock believes hacker attacks on small businesses are practice

target to one with a single, unchanging "IP address" that's always available.

The solution? "Never underestimate the strength of deterrents," says Hancock. "If it's too much of a pain to block up your Internet connection, the vandal will get bored and simply click away." Some basic survival strategies:

Passwords: They're the first line of defense. Even PCs should be protected, because everything is a potential point of entry.

So should critical documents. For

remote users, consider SecureID, (800 732-8743), which changes the

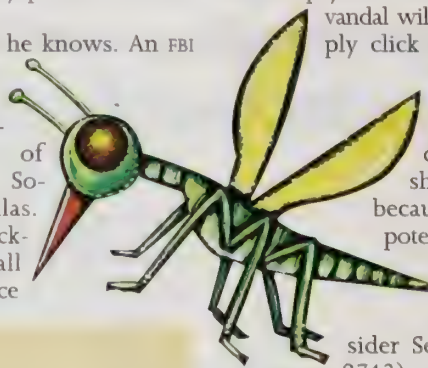
access password every few minutes. Users carry a synchronized card or key-chain that displays the current password. An outlay of \$4,500 buys the system itself and cards for 25 employees.

Firewalls: These allow only authorized people to get into files on the server. You'll need one for each server in your office. Make sure it includes monitoring software and "sniffers" that can help you detect and track suspicious activity. The cost starts at \$1,000 from vendors such as Check Point Software, 3Com, and Network-1 Security Solutions but figure on spending closer to \$5,000 for extra layers of security. Watchguard's package, for instance, includes a "security appliance" installed on your server, plus management systems, software updates, a year of security advisories, and live support. The latter is a must because of the complexity of security; buy a service contract if it's not included.

Secure Socket Layers/Encryption: A secure socket, which comes with your server, creates a secure line of transmission to thwart hackers who try to intercept information traveling on the Web. In case they do, encryption makes the information difficult to read by scrambling a message or credit-card number during transmission—and you've got the only decoder key.

Costly? You bet. But cybercrime is a fact of life, making security just another cost of doing business. Alas, the Web really isn't so different from the offline world.

—RIVKA TADJER AND RICK GREEN



Security Blankets

SOME THINGS YOU CAN DO TO KEEP HACKERS FROM DESTROYING YOUR SYSTEM.

- Set up firewalls in front of servers and cyberwalls on servers.
- Turn on audit logs that come with every operating system and check who's using the system.
- Isolate your Web server from rest of the network; this cuts off a point of entry.
- Encrypt and password-protect the data that are critical to the business.
- Change passwords often, especially after staff turnover.
- Monitor the people who come in and out of your office; keep them off your system.
- Keep backup systems, preferably offsite and on tape.

for something bigger, similar to robbers knocking over a 7-Eleven before they try a bank job. But outsiders aren't the only threat. Hancock suggests keeping a wary eye on insiders—"disgruntled ex-employees, acquaintances of employees, even customers who walk into the office and notice that passwords are left on Post-it notes in plain view." (That's why getting hacked is murder on morale. "Because you don't know who's doing it, everybody becomes a suspect," Gaudette says.) Chuck Shih, an analyst at Gartner Group Inc. in Stamford, Conn., says that low-priced local ISPs are another weak point because they lack expert security personnel and systems. And your vulnerability increases dramatically when you shift from a dial-up connection to a full-time link such as T1 or cable lines, because it changes you from a moving

Hackers could be using attacks on small companies as practice for bigger jobs

in to plug that hole by extending the firewall to the Web site under an existing service contract. Still, the damage could cost thousands to repair—insurance doesn't cover all the losses—and it could have been worse. Capetown's site is just a billboard with demos.

Set up an action plan to deal with hackers. Click Online Extras at frontier.businessweek.com

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Plugged

Get a network. It's a great way to drive growth, if it doesn't drive you crazy first

by Chris Sandlund STEVEN LUNDSTROM REMEMBERS the moment he knew his company was coming apart at the seams—technologically speaking. He was hovering peevishly over Aroma Naturals Inc.'s sole computer, one eye on the clock, the other on his accountant tapping away at the keyboard. "We've got to input this order," he snapped, trying to coax her off the machine. "UPS is arriving in an hour."

"Well, I've got to pay the staff," she replied tersely, focused on finishing the payroll. "They're leaving in an hour."

This sniping on a busy afternoon two years ago wasn't personal, but it did stem from a serious dysfunction in the Aroma Naturals family. Lundstrom and his wife, Tina Rocca-Lundstrom, had hit the limits of growth for their company, a manufacturer of aromatic candles based in Irvine, Calif. Until then, they had kept things moving by dividing tasks. She handled product development and marketing, he took on manufacturing and what Tina calls "the gadgetry." But one gadget was now killing productivity. As revenues neared \$1 million, the Macintosh that had carried them from kitchen table to factory floor had become a bottleneck.

Steven knew what they needed: more computers on a local-area network (LAN). And once he had it, he was hooked. An initial purchase of five desktop PCs quickly mushroomed into an investment of more than \$40,000. The Lundstroms now have three servers—one for E-mail, another for sharing files, and one more to host the company's Web site. They've also added a high-speed DSL phone line that connects the servers, 12 PCs, and three Macs to the Internet, and will support the company's impending move into E-commerce. This year, 25-employee Aroma Naturals expects revenues of \$4.5 million on sales that doubled each of the past two years—a growth path the Lundstroms link directly to their spending on technology. "I only regret that I don't have more money to buy



WAXING ENTHUSIASTIC:
The Lundstroms link Aroma
Naturals' growth directly to
their spending on high tech

more things to grow my business even faster," Tina says.

It's a common sentiment these days, especially regarding networks. By the end of last year, 37% of companies with 10 to 19 employees had put their PCs on a network, says Raymond Boggs, head of small-business research at International Data Corp. A year earlier, only 30% had. Among companies like Aroma Naturals with 20 to 99 employees, the number jumped from 42% to 52%. No wonder such companies as Cisco Systems, Dell Computer, and Microsoft are racing to tailor cor-

High-tech giants are racing to tailor their corporate products for small business

porate products for small business, while a startup like Ramp Networks Inc. finds a ready market for its easy-to-use Internet on-ramp. It also helps explain IBM's recent purchase of Whistle Communications, whose WhistleJet server simplifies E-mail and Web access for small businesses. The increasing number of inexpensive products helps fuel entrepreneurs' imaginations (page F.28). "After the LAN is in place," says Boggs, "small businesses are doing so much more than they ever imagined." Aroma Naturals added a digital-photography studio. Now, product pictures are kept on

a server to update the Web-site catalog—shaving thousands from its marketing budget.

It's an ambitious network for a company of Aroma Naturals' size. You might need less. But a network's basic purpose is to let everyone in a company communicate with everyone else; share resources, files, and databases; and pass documents around effortlessly, or even work on them simultaneously. At the very least, it stops a lot of wheel-spinning. Ideally, it can sharply boost productivity.

So, does spending equal profits? Hardly. "A lot of what I hear is technology for technology's sake," says Michael Silver, a senior analyst with Gartner Group. "That's not a good way to make a return on an investment."

Unfortunately, gauging the payback from a LAN is nearly impossible. "There are ways to measure," says Silver, "but a lot is educated guessing." He suggests asking three questions before proceeding: What is today's technology costing you? How much will you pay for change? And how are you going to quantify the benefits derived from the change?

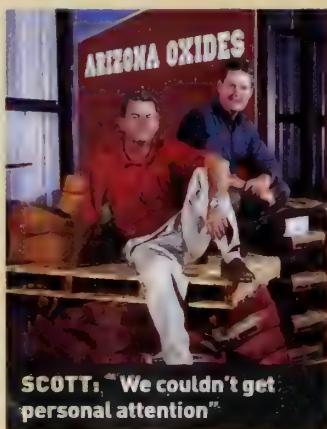
These deceptively simple questions mask the often maddening complexity of technology planning. Savvy entrepreneurs think about the answers ahead of time; others are forced to confront them as they arise. Mark H. Kreditor, owner of Get There First Realty in Dallas, a residential property management outfit, is in the foresighted camp. An early adapter to technology, seven years ago he connected nine PCs in a peer-to-peer network—one that lets any computer on the system call up applications and files from any

Getting Help

VINCENT SCOTT

The Business: Arizona Oxides in El Mirage, Ariz. Employs 20 people. Manufactures industrial pigments.

The Job: Executive Vice-President Scott had to find a good networking consultant.



SCOTT: "We couldn't get personal attention"

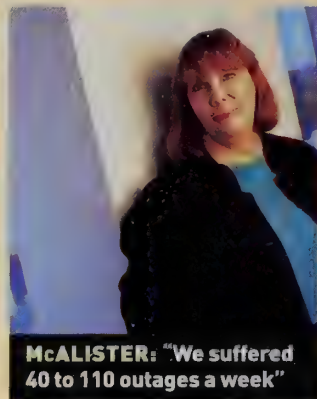
"We're not computer specialists, but we've learned how to choose one. We're pleased with Dave Grenda, our current consultant, but we weren't pleased with earlier ones. We couldn't get personal attention. Everything was on the clock. We fall into the size category that you need some attention, and Dave gave it. The key to finding the right match is to interview a number of consultants. If you've got someone on staff with a good knowledge of hardware and software, get them involved, so you ask the right questions. Find a consultant who has a genuine desire to help you and your company, not just sell you hardware and software they're familiar with or are licensed to service. Being a small company, you [probably] don't have anyone in charge of MIS issues. View the consultant you hire as your MIS department."

LANs End

DEB McALISTER

The Business: Holland McAlister PR Inc., Dallas, a 14-employee firm doing high-tech public relations.

The Job: McAlister, the president, tried to install a network that would do it all—but didn't. Now, she lets her Internet service provider handle the E-mail.



McALISTER: "We suffered 40 to 110 outages a week"

"We decided to install a network as part of the move to a new building last December. I wasn't interested in just a file server. I wanted my own E-mail server and wanted to manage it myself. We aren't big enough to have a T1, so I decided to use ISDN for our 'always-on' service. But we suffered 40 to 110 ISDN outages a week. There were times when I couldn't get onto the Internet. Worse, we started hearing complaints from customers that their E-mail to us was bouncing back. So we're back to using our ISP for E-mail, after spending \$10,000 in hard costs for the server, plus the cost of switching and lost time. Since July 8, we've had only one ISDN outage, but we've kept E-mail at the ISP. We're thinking of doing a trial with it back on our server, but that's still pretty scary."

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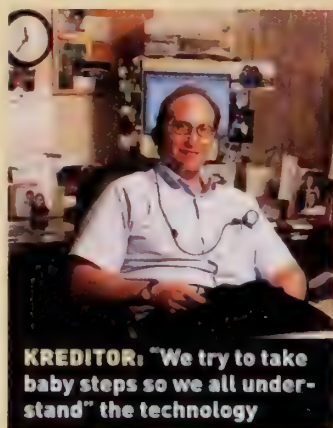
Keep It Simple

MARK KREDITOR

The Business: Residential property manager Get There First Realty Inc., Dallas.

The Job: Kreditor, owner of the 10-employee firm, installed technology that anyone in the company can troubleshoot. That reduces tech expenditures and frustration.

"Small businesses in this country need not be confused by technology. But to avoid confusion, they need to step back and ask: What do I need, and what can I understand? If you buy too much technology, you'll end up spending more to service it and end up hating it. We keep it simple so that we can service it. For example, you get a lot of tornadoes and lightning around here, so everyone knows our simple backup in case of a power outage. Sometimes the only person who understands the technology is the business owner, and that won't work—especially if something breaks down when you're out of the office. We try to take baby steps so we all understand it. It's amazing how much people will learn if you give them products that are easy to understand. When we upgraded to Windows 98 and Microsoft Office 2000, we upgraded everybody in the company at the same time so people could learn from one another. If I had to send a new hire to some special classes just to work here, it wouldn't be that easy."



KREDITOR: "We try to take baby steps so we all understand" the technology

other. Before long, Kreditor's own PC began grinding to a halt as his staff tapped into property records kept on his hard drive. When he wanted to use his spreadsheet, Kreditor would shout across the office to get them to log off his computer, disrupting their work. Obviously, the existing technology cramped productivity. Kreditor's solution was to add a then-\$4,000 Dell server to his setup two years ago. "We've weaned ourselves off the local hard drive," he says. "Now, we save to the network." The database previously on his PC now resides on the server—which keeps the company hopping.

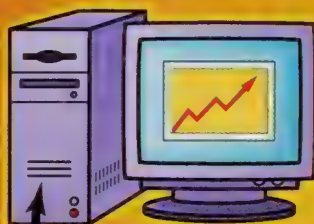
While Kreditor addressed his problem head-on, John Hartman, the 56-year-old owner of a Tulsa marketing outfit, didn't even realize he had one: customer alienation. At Hartman Communications, each of the company's 11 employees had a computer, but just one had a modem connection to America Online for E-mail. That meant client queries went unanswered for long stretches—and extended Web searches irritated colleagues waiting their turn.

Finally, 30-year-old Allison Radcliffe, who had come to Hartman from a major corporation, began beating the drum for the companywide Web access and E-mail she'd had in Corporate America. Her arguments amplified requests Hartman's customers made to E-mail him directly. So he listened to Radcliffe's plea and hired PC Computers & Software, a local PC manufacturer, to overhaul the existing PCs and add a network, a server, and an ISDN connection. Afterwards, Hartman saw his clients' enthusiasm for electronic communication—and how much they had yearned for his company to add it. "Frustration

Networking Basics: Plugging In at Lower Prices

SERVER

A central computer where your company can store files; also can serve up E-mail, host an intranet, or connect everyone to the Internet. **Major suppliers:** Dell, IBM, Compaq, Apple. **Prices today:** \$1,368–\$9,179. **Prices in 1995:** \$10,111–\$40,000.



SERVER SOFTWARE

A special operating system that lets the server work its magic. **Major suppliers:** Microsoft, Apple, Red Hat, Linux. **Prices today:** Free–\$686. **Prices in 1995:** \$1,295.



NETWORK ROUTER

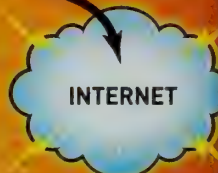
Hardware (and occasionally server software) that directs incoming information from the Internet to the appropriate computer. **Major suppliers:** Cisco, Ascend. **Prices today:** From \$499. **Prices in 1995:** \$995–\$2,195.

NETWORK HUB

A connector that allows workstations to communicate with one another. **Major suppliers:** 3Com, LinkSys. **Prices today:** \$20–\$189. **Prices in 1995:** \$240–\$480.

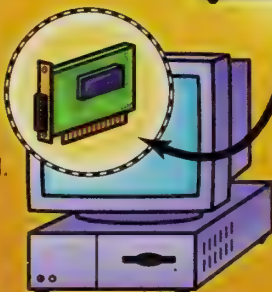


INTERNET



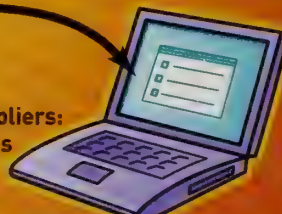
NETWORK INTERFACE CARD (NIC)

Connects your staff's workstations or server to the LAN. **Major suppliers:** 3Com, LinkSys. **Prices today:** \$28–\$79. **Prices in 1995:** \$135–\$200.



WORKSTATION/NODE

Your staff's PCs or Macs when attached to the LAN. **Major suppliers:** Dell, IBM, Compaq, Apple. **Prices today:** \$700–\$2,500. **Prices in 1995:** \$2,200–\$5,200.



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could have led them to move the account," Hartman says, relieved he acted in time.

While losses from existing systems are hard to quantify, the price of an upgrade generally comes with a number. Hartman invested \$16,000 to install his new network. Silver, however, warns that you should also figure in such costs as lost productivity during training, downtime during installation, and time the staff loses making technology work rather than doing their jobs. In some cases, such costs can be crushing. Exhibit A:

Deb McAlister, owner of the Dallas public-relations firm Holland McAlister PR.

Networking experts are split on whether McAlister should have even tried to host her own E-mail address when she added a LAN to the previously unnetworked business,

but the consequences are clear. She was fired by a \$250,000 account when she didn't respond to the client's E-mail. That's because she didn't get it. McAlister had her SoftArc FirstClass E-mail server configured to receive E-mail directly from the Net via a Southwestern Bell ISDN line. She claims the line worked only intermittently for months, bouncing back hundreds of messages. Worse, she couldn't resolve the problem. Although Southwestern Bell spokesman Chris Talley maintains that McAlister's situation is "likely a serv-

er issue," her Internet Service Provider (ISP), her systems consultant, and her software vendor disagreed. Fault aside, McAlister and her staff spent many maddening days trying to correct the problem. "They probably thought I was the biggest witch in the state," she says. "I was calling, screaming, four times a week." Eventually, McAlister let her ISP host her E-mail, which cost no more than doing it herself. Why had she tried it to begin with? As a PR firm for technology companies, she wanted to show she could—a classic case of technology for its own sake.

Maybe McAlister should have followed the lead of entrepreneur Bill Weiner, a purveyor of auto accessories in car-crazed Silicon Valley. Weiner could have added a T1 line and hosted his own E-commerce site, gaining some cachet among his high-tech neighbors in San Jose, Calif. But that would have cost his 23-year-old mail-order catalog business \$800 a month. Instead, he decided to host the site with an ISP. "As a small business, you ask yourself if you want to spend money to have a T1 line in the office or let someone else host it who's in the hosting business," says Weiner.

And yet the most elaborate network imaginable can pay off in the right small business. Just ask Dr. Norman Anderson, who measures success in terms of

Before upgrading, factor in costs such as productivity lost during installation

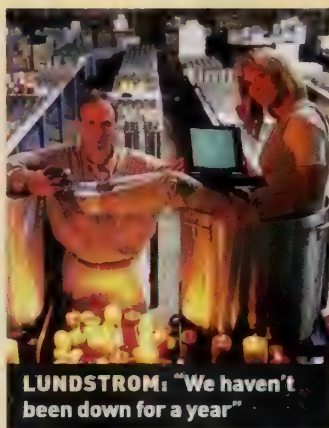


Crash Test Dummies

STEVEN LUNDSTROM

The Business: Candle-maker Aroma Naturals, Irvine, Calif.

The Job: Plagued by crashes, co-owner Lundstrom booted his operating system and installed Linux.



LUNDSTROM: "We haven't been down for a year"

"When we got started, we bought about five computers and networked them right away. It was just peer-to-peer—no server. Everyone could access the accounting software's ledger file that was on my workstation. My machine got overloaded when everybody tried to log on. Things were slow, and my PC crashed often. We installed a Windows NT server that was quite a bit faster than our peer-to-peer system. But when five or six workstations running our MYOB accounting program accessed the ledger file on the NT server, a copy of MYOB would quit on one of the workstations. Once one quit, the others froze. We all had to shut down and reboot—up to 15 times a day. After a while, we replaced the NT with Linux—and we haven't been down for a year."

The Importance of Input

ARTHUR PRICE

The Business: Cohen & Rosenthal, law firm, Springfield, Mass.

The Job: Price, a partner, oversaw installation of a new 30-seat local-area network. Getting input from every level ensured the network would serve everyone.

"Before we installed a revamped LAN, we pulled together a five-person team that brought different types of knowledge and experience to the table. I was the business person. Another partner was technically knowledgeable. An associate had worked at a larger firm that was more advanced than we were. Our systems administrator knew our existing equipment and software, and my assistant provided secretarial input—we decided on Microsoft Word over WordPerfect, for instance, because she pointed out Word integrated better with the other software applications we needed. Only after we determined what we wanted did we bring in the consultant. We had constant communication with the consultant, but each of us sat in only on the meetings where our input made a difference. For me, that was on business decisions. For others, it was on technical choices."



PRICE & CO.: "We had constant communication"

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saving lives—and his physicians' time. The network he set up last year ties all five offices of the Robert Boisenault Oncology Institute, based in Ocala, Fla., into a Wide Area Network via T1 lines. The rapid connections let doctors at each clinic download their patients' massive CT scan files from the Institute's server, which gets them electronically from CT scan centers over other dedicated clinic lines. This slices days off the time needed to develop a treatment plan. Doctors don't have to go to headquarters to see scans, and consulting colleagues can view the same

data in their own offices. Sure, the T1 lines are expensive, but so are personnel in this business, and the increased efficiency is measurable: Anderson, for the moment, has been able to put off hiring another doctor.

With a payoff like that, who wouldn't want to get plugged in?



Learn more about managing your technology effectively. Click Online Extras at frontier.businessweek.com.

Very Hard Wired

When John Hartman decided to set up a local-area network at his Tulsa marketing firm, the idea was to bring wires to the staff, not move the staff around to meet the wires. But Hartman Communications' office is in a house built in the 1920s, with an addition put on in the 1950s. Hartman didn't consider that the newer walls were solid cement and brick—not exactly the kind of material you can snake cable through. Before the LAN was completed, several employees had to move their desks to the side of the addition that's closer to the wires running along the walls of the old house. As for Hartman, his office now has unsightly "lumps" creeping under the carpet from the baseboard to his desk. The moral: Before you get ready to install a network, get intimate with your office space. Here are some important pointers that might save you money on cabling:

Talk to the Landlord: Even if you've got dropped ceilings and conduits between floors, consult your landlord. According to Gerry Lederer of the Building Owners & Managers Assn., the word customer is replacing tenant, and building owners may help upgrade space to accommodate networks. Your building manager may know someone in another property who's planning an installation and get you a bulk discount on labor and cabling.

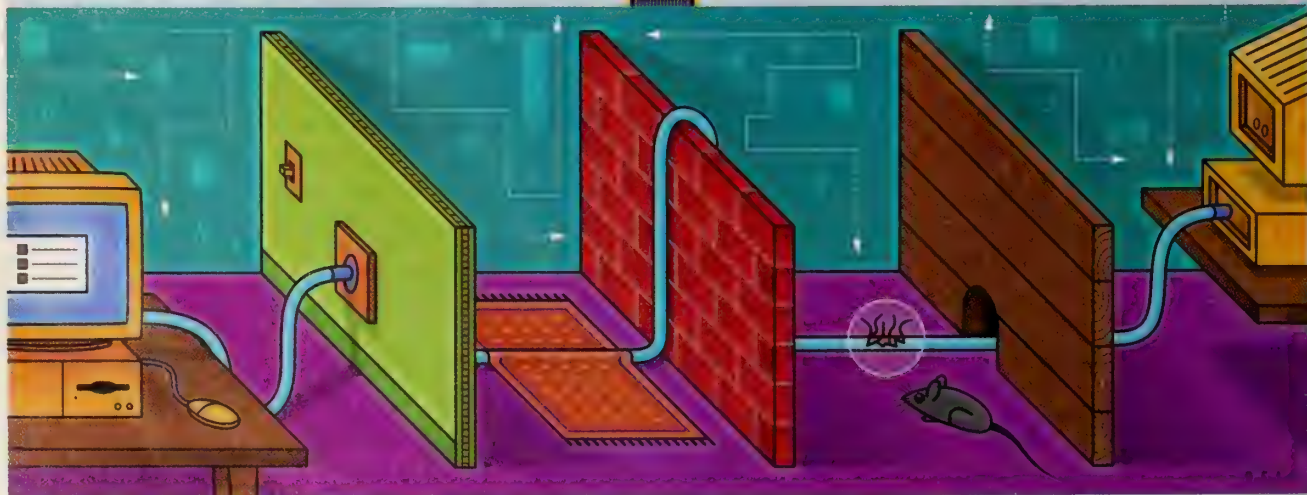


HARTMAN: Cement walls hampered his new network

Beware Bad Wiring: If you rent prewired space, check the quality of the cabling. Cables from just a few years ago can't handle today's high-speed Ethernet networks. Despite short-term headaches, says Joel Menzies, a consultant who helps cable businesses at PC Solutions in New York, "once it's done it'll be there for a few years."

Put Plugs Everywhere: "You want your Ethernet connection to be like a power outlet," says Kevin Tolly, president of network consulting firm The Tolly Group. He advises installing three times as many Ethernet jacks as employees. Scott Muse, the cable technician who wired Hartman's office, says small businesses skimp on the number of outlets they hook up—and he ends up returning to add plugs at a greater cost per connection.

Pull Two for One: Cable is much cheaper than labor. Even if you don't add an extra network connection to each office, the experts recommend pulling two strands there instead of one. The extra pair gives you room for growth—and a backup in case the primary wire goes dead. If your company lives on its network, Tolly suggests pulling a fiber-optic strand, too. The falling cost of fiber might make it the essential high-speed connection in the near future.



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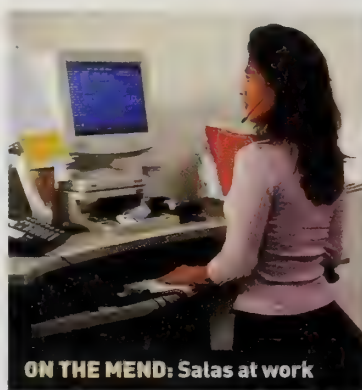
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The Comfort Zone

Smart planning can take the pain and stress out of ergonomics for employer and employee alike

by Laura Muha MOMENTUM TEXTILES, an employee-owned company in Irvine, Calif., sells fabric to some of the nation's biggest makers of ergonomic chairs and office furniture. But they'd never given ergonomics much thought when it came to their own cramped and poorly arranged work stations, where customer-service reps turned and twisted to reach big fabric swatch books and typed at unadjustable desks for hours on end.

About three years ago, one of those reps, Kimberly Salas, was diagnosed with carpal tunnel syndrome, a painful inflammation of the wrist that made it impossible for her to perform normal household tasks or type at the computer (table, page F.36) "In the beginning, I was scared. I had never gone through this before. You don't know what your future is going to be like," says Salas, now 29, who lost about four months of work as a result of her injury and subsequent surgery. She has since undergone a second round of surgery for other work-related wrist problems.



ON THE MEND: Salas at work

Salas wasn't the only one to get hurt. By 1997, Momentum's management realized that 6 out of 13 reps and an accounting clerk had suffered hand, arm, and shoulder injuries that doctors linked to their working conditions. The company had to terminate three of them because it couldn't provide suitable work, says Momentum Chief Financial Officer Joanne DeHaven. A fourth decided to quit on her own. Only Salas and Cheri Curd, an accounting clerk, managed to return.

Morale plummeted as workers wondered if they'd be next and workers' compensation costs doubled. "It took a terrible toll on everybody,"



says DeHaven. Terrible, perhaps, but Momentum's experience is hardly isolated. So-called musculoskeletal disorders—also known variously as cumulative trauma disorders or repetitive strain injuries—represent the fastest-growing workplace injury in the country, accounting for 34% of all lost workdays due to injury or illness and \$1 of every \$3 spent on workers' comp claims, according to the Occupational Safety & Health Administration. These "wear-and-tear" injuries are caused by overuse or improper use of muscles, ligaments, or tendons of the upper body (table). Employees at greatest risk fall into two categories: those who perform the same movement repeatedly, whether on an assembly line or at a computer terminal, and those who remain in a static position for long periods of time—with their arms parallel to a computer keyboard, for instance, or hunched awkwardly over a drafting board.

While these injuries strike workplaces of all sizes, small companies tend to feel the human and financial impact more intensely. Losing even one key employee can be devastating, and often small businesses don't bring workers back to the job as quickly as larger employers because they lack the resources to accommodate them, says David Roy, an ergonomist and director of engineering/claims services for Travelers Property Casualty Corp., the fourth-largest workers' comp insurer in the U.S.

This month, OSHA is expected to release a final draft of proposed rules aimed at reducing musculoskeletal injuries in the workplace. These measures would require many companies to institute a formal ergonomics program, which involves evaluating workplace hazards, training employees, and, in some cases, buying new equipment. It's unclear when and if OSHA's ergonomics standards will pass, given opposition from small-business lobbies such as the National Federation of Independent Business, which want to block the new rules until more ergonomics studies are done. But there's no reason for you to wait until someone forces you to

Preventing Employee "Wear and Tear"

Some helpful online resources to educate you and your employees about workplace injuries and measures to help prevent them.

HUMAN FACTORS AND ERGONOMICS SOCIETY (www.hfes.org) This professional organization for ergonomists includes a referral service for employers who want to hire an ergonomics consultant.

ERGOWORLD (www.interface-analysis.com/ergoworld) provides an excellent portal to dozens of other ergonomics-related Web sites.

OSHA (www.osha-slc.gov/SLTC/ergonomics/index.htm) The Occupational Safety and Health Administration ergonomics Web site includes information on OSHA's proposed regulations, publications related to ergonomics, and links to other ergonomics sites. It even features a downloadable video of ergonomics tips.

ERGOWEB.COM A commercially sponsored site with extensive information on ergonomics, consultants, publications, and products.

take stock of your company's ergonomic health. "If you take it seriously, it's a win-win situation, because when employees are comfortable, they do better-quality work and are more productive," says Marvin J. Dainoff, director of the Center for Ergonomic Research at Miami University of Ohio. "The side effect is that they don't get hurt."

Ergonomics, which is derived from *ergon*, the Greek word for work, is the science of fitting the work environment to the employee. It involves everything from evaluating how tasks are performed to how the body interacts with equipment. Studies over the past few years by the National Institute for Occupational Safety & Health and the National

Where Does It Hurt?

Common workplace injuries caused by ergonomically incorrect design

NAME	DEFINITION	SYMPTOMS	TREATMENT
CARPAL TUNNEL SYNDROME	Inflammation and swelling of ligaments and tendons in the wrist, which lead to compression of adjacent median nerve.	Numbness and pain in wrist, arm, and hand, which often increases at night.	Anti-inflammatories, splints to stabilize the wrist, and in severe cases, surgery to relieve pressure on the nerve.
TENDONITIS AND TENOSYNOVITIS	Inflammation of a tendon, the soft tissue that holds muscle to bone (tendonitis), or the membrane that sheaths a tendon (tenosynovitis). Frequently affects shoulder and upper arm.	Pain upon movement and, in some cases, swelling.	Rest or immobilization, hot or cold compresses, anti-inflammatory medications and controlled exercise, usually under the supervision of a physical therapist.
EPICONDYLITIS	Inflammation of the forearm muscles or tendons near their site of origin at the outside of the elbow; also known as "tennis elbow" because it frequently affects tennis players.	Severe pain may radiate down the outside of the arm.	Anti-inflammatory medications and rest. Even the most mild cases can last for weeks or months.

DATA: BUSINESS WEEK



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Academy of Sciences have found strong evidence supporting the basic premise of ergonomics.

Paying attention to ergonomics can save you money in the long run. Travelers, for instance, tackled the problem as early as 1993, when it realized how costly workers' comp claims could be. After an internal ergonomics program reduced the average cost of a musculoskeletal disorder claim by its own workers from \$20,000 to \$4,600, Travelers sent ergonomists to look at the workstations of 85 Travelers-insured workers who had filed claims

Many improvements are cost-free—raising PC monitors, say, or rearranging shelves

at small companies for musculoskeletal injuries. The consultants suggested simple improvements ranging from footrests to new chairs and checked up on the results 60 days later. "What we found was startling," says Roy. In 61 cases

where employers implemented the ergonomists' recommendations, 53 of the workers became symptom-free. In the 24 cases where companies had taken no action, 23 of the injured workers still had problems.

Of course, changing human nature is a challenge. Shelley Donow, owner of Donow & Associates, a New York company that puts together marketing focus groups, bought \$300 headsets for each of her four employees so they wouldn't have to crunch a receiver between their ear and shoulder for eight hours a day. "I'm the only one who will wear one," she reports. "They say it messes up their hair."

How can you improve your office's ergonomics health without going broke? First, don't assume you have to spend a fortune. Pricey consultants and expensive equipment are often a waste of resources. Self-education goes a long way to help you sort through the staggering array of ergonomics products out there, and there are plenty of free resources available. One caution: Don't hire a consultant who receives a commission for any equipment they sell you.

When cash-strapped Fanlight Productions, a five-employee film-production company in Boston, found some workers were having wrist and back complaints at their ancient chairs and desks, it hired ergonomist Roberta Carson for \$800. She recommended some cost-free improvements, such as raising the height of PC monitors with phone books, to eliminate neck strain and rearranging storage shelves to limit bending. When they were ready to spring for new chairs the following year, Carson helped them find affordable ones. "We didn't go whoa-hog and buy special ergonomically designed chairs," says Karen McMillen, Fanlight's distribution director. "Because Carson had given us such good specifications, we were able to find something in the \$200 range that is much better than the chairs we had and much more adjustable." Fanlight's total expenditure: about \$2,000.

To keep within your budget, look closely at what your individual employees need and at your existing equipment. "One person may need a footrest, one person may need a document holder that's height-adjustable, one person may need their monitor adjusted to an appropriate height for them," says Carolyn Lundberg, president

JUST DO IT!
Graves sees a
responsibility
to employees



The Economics of Ergonomics

How One Company Spends Its Dollars Wisely

Here's a breakdown of yearly ergonomics costs from 1993 to 1998 at Claim Net, a 23-employee company based in Irvine, Calif. New employees receive all-new equipment to fit the individual worker. Existing furniture has been modified in some cases by adding keyboard trays and other accessories. In addition to listed expenses, every employee is entitled to \$20 monthly towards health-club membership.

YEAR	CONSULTING/ TRAINING	PRODUCTS (WRIST RESTS, BACKRESTS, ETC.)	CHAIRS
93	\$80.00	\$188.04	\$1,469.61
94	00.00	00.00	991.13
95	00.00	00.00	00.00
96	00.00	87.22	588.50
97	00.00	242.87	333.13
98	550.00	221.05	1,713.55

GRAND TOTAL: \$6,475.10

AVERAGE COST PER EMPLOYEE: \$92.50

DATA: CLAIM NET

**"The best part of owning a small business?
Those long hours I spend dealing
with all the complicated financial stuff."**

Robert Tedone,
Owner,
Liquid Colors Inc.,
Atlanta

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of Ace Ergonomics in Newport Beach, Calif.

Lundberg helped set up an ergonomics program for Claim Net Inc., a 23-employee Irvine company that places temporary insurance workers (table, page F.38). Claim Net's employees haven't reported any injuries to date, but CEO Jeannie Graves, a former adjuster and manager of workers' comp claims, didn't want to take chances. While she says it's ultimately up to the worker to change some habits,

Office ergonomics are just like safety rules in a factory: They must be enforced

"the employer has the responsibility to do whatever they can." Whenever possible, try to involve employees in the research and planning process. "You'd be surprised at how often they can come up with simple solutions to what seem like big problems," says Nicholas Warren, an ergonomist at the University of Connecticut's Ergonomic Technology Center. After an employee safety committee made ergonomic changes in the office and factory of Cooper Instrument Corp., a Middlefield (Conn.) maker of food-service thermometers, the number of claims dropped from a peak of seven in 1997 to none so far this year—with a corresponding decrease in workers' comp rates, says Gary Sawicki, Cooper's director of technical services.

At Momentum, there have been no new injury claims since the company made ergonomic improvements. In part, that's because a planned move to larger, new offices allowed them to take er-

gonomics into account when buying the new workstations. But, alarmed by the injuries, Momentum didn't wait. It invested \$10,000 before the move in keyboard trays and other adaptive equipment.

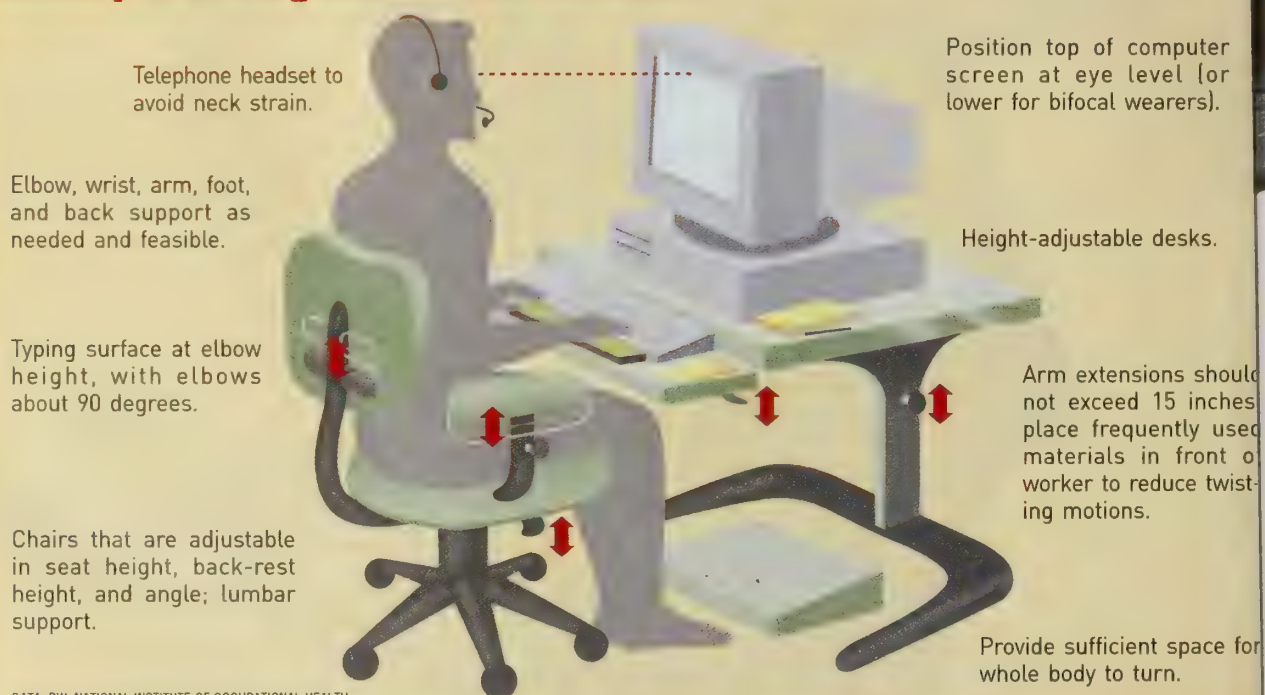
Accounting clerk Curd, who, at her work dropped dishes and couldn't grip pencils, now serves on Momentum's ergonomics committee. "I'd never heard of ergonomics," says Curd, who still has tendonitis in her shoulder. "If I had known how I was injuring myself, I wouldn't have allowed it, and the company wouldn't have allowed it."

The committee evaluates high-risk employees such as customer-service reps, at their workstation quarterly, giving grades so they can see where they need improvement. Other employees go through the process annually. Recently, CEO DeHaven received a negative grade for not using her headset. She promptly got with the program. "If we were a manufacturing facility, and we had a rule that said you have to wear safety glasses, and someone wasn't wearing them, you wouldn't put up with it," she says. "People aren't used to that in an office environment. They think, 'I work in an office; can't get hurt.'"

Of course, too many people have learned the hard way that they can get hurt. A company culture that promotes ergonomic practices is a powerful dose of preventive medicine.

 Learn more about the economics of ergonomics. Click Online Extras at frontier.businessweek.com

Anatomy of an Ergonomic Workstation



DATA: BW, NATIONAL INSTITUTE OF OCCUPATIONAL HEALTH



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A Jump-Start for Cheap Loans

Thanks to a boom in securitized loans, small companies are getting a good deal on rates

ROBERT E. WEHE, 81, former successful banker turned hotel entrepreneur, has been around long enough to recognize a good deal. When the businessman received a letter in the mail earlier this year from SierraWest Bank offering great

terms to refinance the debt on Wehe's Meadowmont Lodge in Arnold, Calif., he investigated a bit—and then jumped.

The deal: he refinanced \$200,000 in debt and got \$175,000 in cash to buy an additional hotel. His new monthly payment, however, came out only slightly higher than the one on his old loan. The terms brought down his interest rate from 11% to 8.9%. What's more, he replaced a floating rate with a 20-year fixed rate, letting him escape a pending balloon payment when he refinanced in April. Better yet, Wehe says he can sell the hotel more easily in a few years

because the loan is assumable. "I am delighted," says Wehe, who had a 34-year career in banking. Of course, he adds, "I like the fixed rate personally. But if I were a banker, I wouldn't be giving a fixed-rate loan for 20 years."

Has SierraWest gone daft? Did some sort of clerical error give Wehe terms usually reserved for blue-chip companies? Hardly. Wehe can thank the largely unnoticed trend toward securitization of small-business loans. In the past year, a few banks and finance companies have begun to bundle conventional small loans and sell them to investors as securities. This growing secondary market is helping these lenders offer more loans—and larger ones—to small businesses for longer terms and at favorable fixed rates. Spurred by growing competition in the huge small-business loan market and

by changes in Small Business Administration (SBA) regulations and federal law, at least a half-dozen lenders nationwide are putting together securitizations primarily for conventional small-business loans. They sold \$1.2 billion in securitized bonds in the past 16 months—\$1 billion of it in June alone.

It's a trend that is likely to gather steam as the secondary market for securitized small-business loans grows among big institutional investors who buy them. They can only be encouraged by maturities of up to 25 years that often carry AAA ratings, giving a package of small-

by Janin Friend



business loans the same credit standing as IBM or General Electric Co.

In many cases, the benefits are passed on to borrowers. While lenders can offer favorable terms without securitization, some regional banks and financial companies could not offer similar deals without it. "Like the homeowner, the small-business owner can obtain long-term, fixed-rate financing over 25 years. It was unheard-of in the past," says William H. McGaughey, senior vice-president and director of secondary marketing at Bank of the

West, which recently purchased SierraWest Bank in Truckee, Calif. "We would not be willing to do these loans without securitization."

The technique isn't new. Securitization has been used to package home mortgages and SBA-guaranteed loans for about 15 years. Under

the SBA's general business-loan program, known as 7(a), the government agency guarantees up to 80% of the loan amounts made to small businesses, with private lenders accepting the risk of default for the remainder. In 1985, the lenders began pooling SBA-guaranteed loans and selling them as securities, and in 1992, finance companies were allowed to bundle and sell unguaranteed parts.

Turn of the Tide. Then, in 1994, Congress made securitization of small-business loans easier by relaxing investment restrictions and securities-registration requirements, treating such offerings more as mortgage-backed securities. Still, there was little action during the 1990s, apart from SBA packages

and those involving restaurants, auto dealers, and other franchises of big national companies.

Then, about a year ago, the tide turned. Regulations changed, and lenders began to compete intensely for the small-business dollar, expanding conventional loan securitization to a wide range of service and manufacturing businesses. As a result, several regional banks and large financial institutions entered the field (table). The largest deal was \$589 million offering in June by Money Store Inc., now owned by First Union Corp. For the first time it bundled 850 primarily conventional small-business loans, some of them exceeding the cap of \$750,000 to a single borrower that would be required for an SBA-backed deal. "The market has become increasingly competitive," says Al R. Busby, senior vice-president for structured products at First Union Corp.'s Capital Markets Group in Charlotte, N.C. Securitization "is a way to keep our customers with loans terms that are more attractive."

Win-Win. That's because lenders are seeing the costs drop, too. First, they don't have to pay guarantee fees to the SBA. Second, reselling the loans immediately means the lenders can improve the liquidity and free up more capital for new loans. And the capital itself is cheap, thanks to the patina of a gold-plated AAA-rating. Lenders have been able to snare capital at an average 7% to 7.5% and then spin off loans at 10% to 11%, according to Joe J. Orr, vice-president at Duff & Phelps Credit Rating Co. in Chicago. "There is next to no chance investors will lose money on these securities," he says. "It's the magic of securitization."

Still, it's not open season for borrowers. Lenders try to reduce defaults by choosing more seasoned small businesses where cash flow is predictable, diversifying the loan portfolio, or basing the loans

"The small-business owner can obtain long-term, fixed-rate financing. It was unheard-of in the past"

Bonding Experience

Some key players in securitization of conventional small-business loans, and their deals to date.

NAME	LOCATION	WEB ADDRESS	TELEPHONE	DETAILS
SIERRAWEST BANK	Truckee, Calif.	www.sierrawest.com	800 872-4177	\$85 million in bonds in May, 1998, and \$102 million in bonds in June 1999.
AMRESKO INC.	Dallas	www.amresco.com	800 966-7887	\$220.9 million in June, 1999, and \$111.4 million in May, 1999.
MONEY STORE First Union Corp.	Charlotte, N.C.	www.firstunion.com/ smallbusiness	800 566-3862	\$589 million in June, 1999.
FIRST INTERNATIONAL BANK	Hartford	www.firstinterbank.com	800 727-0700	\$65 million in December, 1998; \$55 million planned for September
BANK OF YORBA LINDA	Mission Viejo, Calif.	(no Web address)	949 452-0922	\$60 million in August.
HELLER FINANCIAL INC.	Chicago	www.hellerfin.com	800 347-6430	\$200 million to \$300 million offering planned in early 2000.

DATA

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...strong collateral. Other protections...
...built in for buyers of the securitized...
...ds. But some financial-industry ex-...
...tives question whether lenders have...
...culated all the risks in small-busi-...
...s financing, which is generally a...
...atile field. "Time will be the judge...
...o whether the AAA rating is war-...
...ted," says

...vid J. Fried-...
...n, a managing...
...ector at Chi-...
...o's Heller Fi-...
...cial Inc., one...
...the nation's...
...ggest small-...
...business lenders.
...One of the...
...ost amazing

...nsformations is AMRESCO Inc., a Dallas...
...ancial-services firm that carries a...
...k-bond rating on its own corporate...
...ot. Nonetheless, AMRESCO has become...
...big issuer of AAA-rated bonds backed...
...small-business loans. For example,...
...June the company completed a...
...20.9 million securitization transac-...
...n, backed by small-business loans...
...restaurants, convenience stores, truck...
...ps, and funeral homes. About 83%...
...the offering was rated AAA, backed...
...by some unusual provisions.
...Among them: small businesses in...
...RESCO's pools contribute 5% to 10%...
...their loan amount into a contin-...
...gency fund to cover defaults. In case of...
...ouble, warning notices go out to all...
...er members about a potential dead-...
...at—giving them a chance to exert...
...er pressure. "You can kind of rattle...
...cage a bit," says Rodney Seigler,

...chief executive of D&S Glass Fabricators...
...Inc., who borrowed \$3.2 million...
...through AMRESCO in July to buy the...
...small Dallas manufacturing company.

...While some may question the ef-...
...fectiveness of this tactic, some small-...
...business owners think they are get-...
...ting some great deals. After shopping...
...for financing for three months,...
...Susan E. Frasca...
...got a \$1.5 mil-...
...lion loan at a...
...fixed rate of...
...9.5% for nine...
...years without a...
...personal guaran-...
...tee from AMRESCO...
...to buy four

...restaurants and create Frasca Hospital-...
...ity Group LLC in Chicago. "It's pretty...
...much unheard-of," she says. "I know...
...AMRESCO's junk-bond rating isn't great,...
...but it has nothing to do with my...
...bond pool. It's no risk for me."

...True enough—she has her money.
...But lending executives are privately ap-...
...prehensive that this type of securitiza-...
...tion can only work in a hot economy...
...laden with cash-rich investors and...
...prospering small businesses. In a...
...downturn, lenders and investors could...
...get burned. Remember the real estate...
...loans of the 1980s and the mortgage-...
...backed securities derivatives crisis? Sure.
...But, to paraphrase Frasca, that's not...
...your problem.



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Labor Intensive

How outside consultants—and listening to the workers—helped keep a union at bay

BY KEVIN KELLY

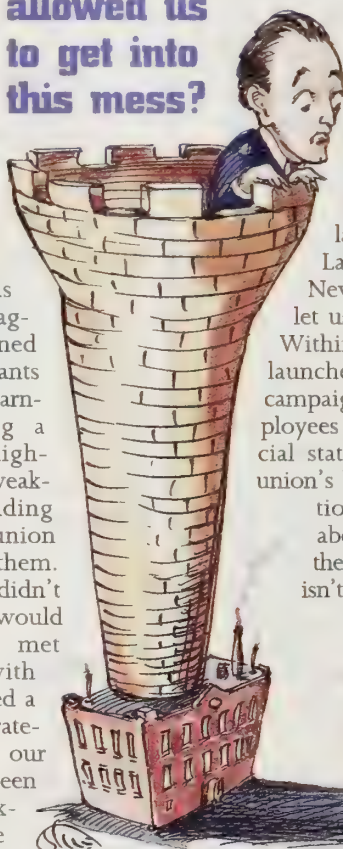
APR. 6 WAS THE WORST DAY of my professional life. From early morning till 3 a.m., the employee meetings dragged on, and each of the nine sessions left me more exhausted and discouraged than the one before. A lot hung on these gatherings: More than 75% of our workforce had signed cards to join the Graphics Communications International Union (GCIU). So my brother, my sister, and I, along with our labor-relations consultants, were meeting with small groups, hoping to open communication. Instead we got impassive, or indeed hostile, looks.

If the workers had voted that day, the union would have won. But they didn't—in fact, they never voted, because the campaign we waged proved so effective that in early June the union withdrew and the election was canceled. Credit an aggressive blitz fashioned by two labor consultants we hired days after learning we'd be facing a union vote. They highlighted the union's weaknesses while reminding employees what a union victory would cost them. Many, for instance, didn't know their benefits would change. We also met around the clock with employees and listened a lot. Ultimately the strategy paid off, much to our relief. The GCIU had been promising our workers, whose average

wage of \$13 an hour is among the highest in the industry, raises of more than 30%. Such an increase would have broken our family-owned printing business, so we feared protracted and divisive negotiations, with the strong possibility of a strike.

Pleased as I was to win, I had fallen into moods bordering on depression during the campaign, pondering how I had allowed us to get into this mess. After all, our employees had thrown

I had fallen into moods bordering on depression.... How had I allowed us to get into this mess?



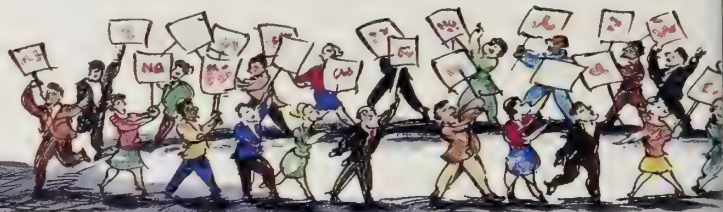
out a union three years ago in a landslide vote. In the following years, I realized, I had lost touch with our workforce. Policies were applied arbitrarily, raises weren't done in a timely manner, and outsiders grabbed plum jobs insiders wanted. Our Spanish-speaking employees did not feel the company made an effort to communicate with them.

Our consultants, Ed Villanueva and Carlos Rojas, of Labor Relations Services in Newport Beach, Calif., didn't let us dwell on these negatives. Within a day of arriving, they launched an intensive education campaign. They walked our employees through the GCIU's financial statements and dissected the union's bylaws and bevy of regulations. Employees learned about its finances, and where the union put its money. "This isn't the union I was sold," one

employee told me. The meetings, usually segmented by language, went on for six weeks. One week we tackled the risks associated with collective bargaining and strikes—real risks, given the promises the GCIU was making. In another series of meetings, we emphasized the benefits employees received from the company—health, dental, pension, profit-sharing, and a 401(k)—and detailed how much they cost. Gradually, the workforce turned around. I helped, I am sure, that Ed and Carlos spoke Spanish. I also spent a day a week until well after midnight on the factory floor, talking with our employees. Slowly they opened up, and I learned what they wanted was the union's chief appeal. "We felt it was the only way you might see the company had problems," said one employee.

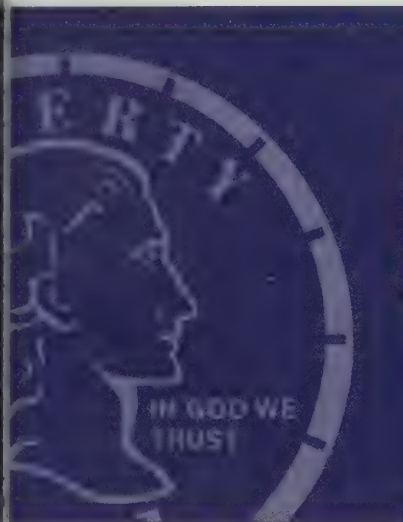
The union postponed the election when it filed charges with the National Labor Relations Board alleging we had threatened to close if we lost. Then, without fanfare, in early June the charge was withdrawn, and the union abandoned the field. What did get out of all this? Months of exhaustion and a big consulting bill. But we have to admit, without the union drive we might have continued to alienate employees, and we might have lost key people. So we've begun to change our policies and communication practices. We're promoting from within, holding bilingual plant meetings, and publicizing the changes. If we don't carry out these policies, I suspect we won't have heard the last of this union. If we do change, though, I hope we'll become the kind of company I am proud to run, one where managers and workers are truly partners.

Kelly is an officer of Emerald Packaging in Union City, Calif. Have you faced a union vote? E-mail us at frontier@businessweek.com.



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Her Business Is Her Castle

Cusumano's blueprint? Think small and network

TWENTY-EIGHT-YEAR-OLD Julie Cusumano has dug 20-foot trenches and waded through rivers of wet concrete. Still, none of those feats took as much guts as her biggest building project: starting Castle Contracting, a 22-employee, \$3 million construction and engineering firm in St. Louis. "What I learned from engineering is problem-solving," says the soft-spoken Cusumano. "You can look at a huge problem, break it down bit by bit, and solve it."

After earning a civil-engineering degree at Purdue University, Cusumano took jobs with giant engineering firms. But it didn't take long to see the frustrations of corporate life, "watching 15 managers ahead of me all vying for the same position," she says.

In 1995, with \$5,000, she and a veteran construction exec founded Castle to serve electrical contractors. After five months, her partner split, leaving the fledgling business for dead. "She stuck it out," says Brent Koch, whose Condaire Inc. has used Castle for 10 subcontracting jobs. Concentrating on tiny projects, such as gutters and ditches, Cusumano logged a decent first-year profit on revenues of \$280,000.

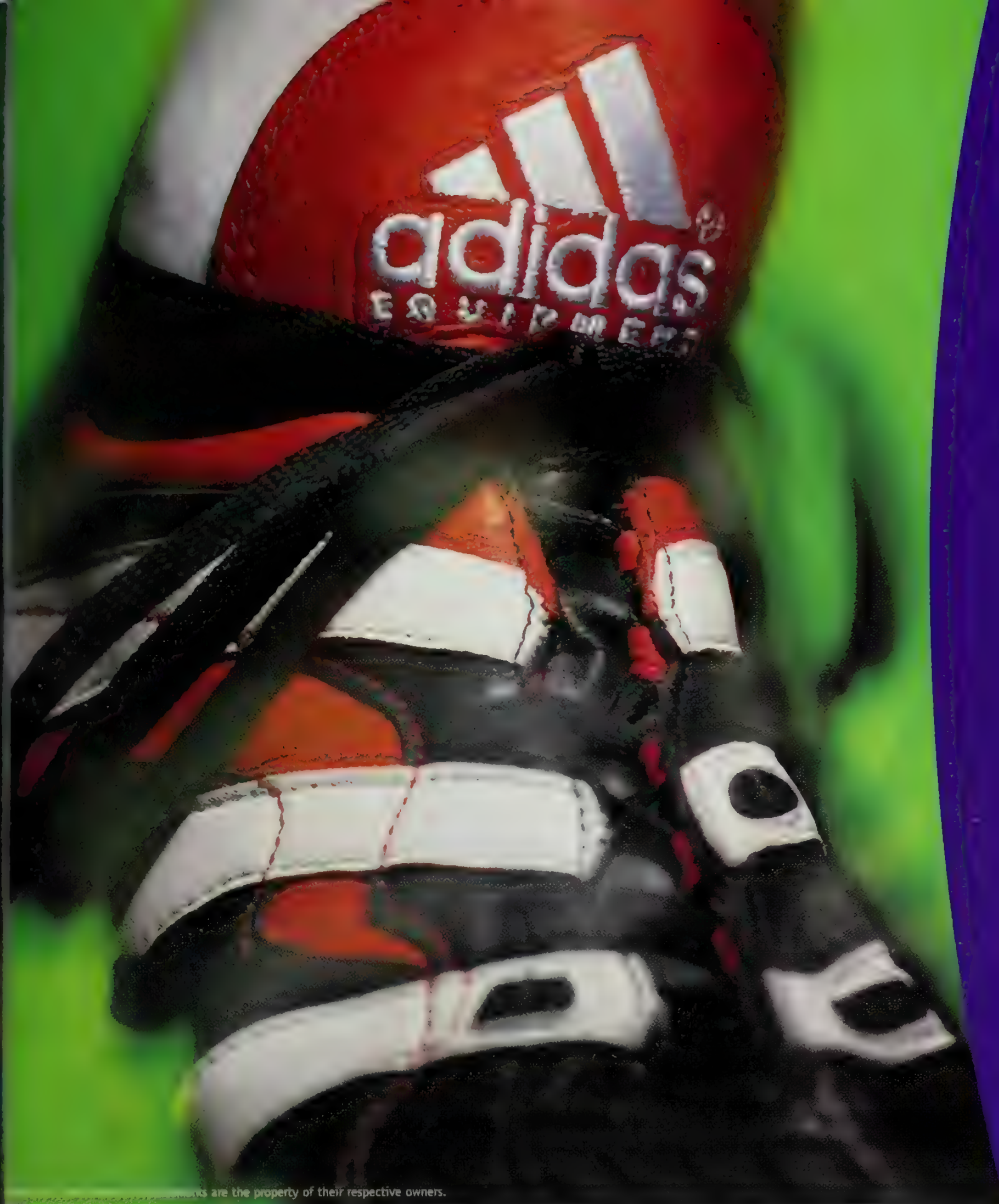
Despite her growing experience, Cusumano still had to surmount the industry's backhoe braggadocio. "I was asked too many times if I was a secretary," she recalls. Unbowed, she networked, becoming a gabby mainstay at three local contractors' associations, where she has drawn 75% of her 40 clients.

While other subcontractors might base a bid on back-of-the-envelope guesses, Castle's \$30,000 accounting software monitors every dollar. That helps the company submit winning and profitable offers without underbidding.

Cusumano's favorite project: the foundations under a new electrical substation for the city's largest hospital. "I love to look at a building and say: 'I built that.'" She feels the same about her Castle.

—DENNIS BERMAN





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LARSEN: While pushing for change, the CEO sees no reason to depart from the basic J&J model

think it made them realize they had to do things differently."

That explains the rumbling you hear from within the New Brunswick (N.J.) health-care giant these days. Larsen and his team are cutting costs by overhauling J&J's far-flung factories, putting more stringent controls on drug development, and pursuing aggressive dealmaking to fill the pharmaceutical pipeline—capped by the \$4.9 billion purchase of biotech company Centocor Inc. in July. Wall Street has voiced its approval. After lagging well behind major rivals for most of '97 and '98, J&J's stock price has risen 25% since Jan. 1, compared with a 1% drop for the Standard & Poor's Health Care Composite index.

ONE-TIME BOOST. Look for more changes ahead. Analysts expect J&J to take further steps to patch up its drug portfolio and strengthen or divest weaker businesses, such as its \$600 million diagnostic unit. It has little choice. This year looks strong, partly thanks to savvy marketing of drugs like the antipsychotic Risperdal and the anemia

drug Procrit. But J&J is also getting a one-time sales boost from the \$3.7 billion buy of orthopedic products maker DePuy Inc. Without another big deal, comparisons will get tougher. Salomon Smith Barney analyst Anne P. Malone expects sales in 1999 to jump 14.8%, to \$27.2 billion, while net income rises 12.7%, to \$4.1 billion. But Malone figures annual sales growth could soon slow, to around 10%, while earnings climb less than 13%.

Larsen won't comment on possible deals or divestitures, other than to say: "Are there businesses we are in today that we won't be in in five years? Sure." But Larsen—who's been with the company for 35 years and became CEO in 1989—insists there's no need to depart from the basic J&J model. For decades, the company has competed in a broad range of health-care businesses—from Band-Aids to surgical equipment—through scores of decentralized units. Indeed, while many competitors, including Pfizer Inc. and Eli Lilly & Co., have sold off medical devices and other businesses to focus on drug operations, Larsen pushed J&J into new areas such as cho-

STRATEGIES

J&J STOPS BABYING ITSELF

cutting deals and tightening R&D to catch up with rivals

At Johnson & Johnson, managing for the long term takes on a whole different meaning. J&J Chairman and Chief Executive Officer Ralph Larsen is quick to point out its reliably steady track record—posting average annual sales and net income growth of nearly 11%—over the past 100 years. That has made J&J seem as immovable as its decades-old brands of baby powder and baby oil.

But there's a thin line between being rooted in your roots and getting stuck in mud. And over the past two years,

frustrated investors grew increasingly worried that J&J had fallen behind rivals in some key areas. The once-unfailing health-care products company suffered through a series of stumbles, including drug development flops and a battering in the coronary-stent business. J&J's annual sales growth slowed to 4.5% in 1998, and net income gained just 11% before charges, down from a 15.5% average pace for the past five years. "Last year was a wake-up call," says Steve Paspal, a senior analyst with John Hancock Funds, which owns nearly 1.2 million J&J shares. "I

Failure to develop a good second generation of its angioplasty technology has cost J&J dearly

lesterol-lowering foods and high-tech wheelchairs.

Larsen argues that the mix gives J&J a healthy balance. Today, 36% of sales comes from drugs, 28% from consumer products, and 36% from professional health-care products like sutures and stents, the metal scaffolds that keep arteries open after angioplasty. But some are clearly far healthier than others. The fast-growing drug unit provides a hefty 60% of operating profits.

"OVERDUE." Moreover, the last two years raised serious questions about whether the J&J way was still working. The most dramatic problem was the company's failure to develop a good second generation of its pioneering coronary stent. Competitors such as Guidant Corp. and Medtronic Inc. jumped in with better stents, and J&J's business collapsed from \$700 million in sales in 1996 to just over \$200 million last year. Says Dr. Stephen N. Oesterle, director of invasive cardiology services at Massachusetts General

Hospital: "They didn't anticipate how quickly this technology would move, and that physicians wouldn't be loyal." J&J is now getting ready to launch a more flexible stent in the U.S. that cardiologists say could help the company win some market share back.

As sales growth slowed last year, J&J had to face a more fundamental flaw. Despite waves of consolidation that have hit the industry in recent years, it had moved too slowly to trim its own sprawling network of factories. That led to last year's restructuring and J&J's first big operational write-off since 1986. Larsen says the overhaul was in the works for two years, and wasn't related to slowing sales. Still, by shuttering 36 out of 158 plants and cutting 4,100 jobs, J&J figures to save as much as \$300 million a year. "This was overdue," says Andrew F. Morey, research analyst at State Street Research & Management Co., which holds nearly 2 million J&J shares.

More pressing, however, is the need to improve J&J's drug development machine. Nine drugs in development fizzled in 1997, failed to get government approval were delayed in 1997 and 1998, says Morgan Stanley Dean Witter analyst G. M. Reicin. That gave J&J one of the industry's skimpiest pipelines, he says. But too, the company's decentralized structure was partly to blame. J&J has separate drug research and development operations, the R. W. Johnson Pharmaceutical Research Institute (PRI) in U.S. and Janssen Research Foundation in Belgium. Each used to make its decisions about which products to push into the costly final phase of human testing. But stricter oversight may have flagged problems that torpedoed late-stage products such as Framlintide, a diabetes drug J&J invested more than \$100 million to develop with partner Amgen Pharmaceuticals Inc. J&J pulled out last year after lackluster test results.

Now, J&J is moving in line with



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he rest of the drug industry han-
 R&D. In June, 1998, Larsen put
 am C. Weldon, an up-and-coming
 itive overseeing J&J's surgical-in-
 nent unit, in charge of its phar-
 utical business. Weldon created
 ommittee, which includes repre-
 tives from Janssen and PRI, to
 monthly for presentations from
 rchers on projects they would like
 ove along in testing. The group
 es whether to give the O.K., ask
 ore information, or kill the pro-
 Stephen S. Tang, vice-president
 nsultant A.T. Kearney Inc., says
 have practiced such stringent de-
 making for years. "They are play-
 a bit of catch-up here," he says.
 it's critical that every dollar
 S—J&J spends less on pharmaceu-
 R&D, \$1.4 billion last year, than
 s Merck, at \$1.8 billion, or Pfizer,
 .3 billion.

DEAL. It will be years, however,
 e changes in drug development pay
 o J&J has stepped up its dealmak-
 The boldest deal was the purchase
 entocor. The biotech company brings
 ising expertise in monoclonal anti-
 es—which attack disease-causing
 ts in the body—as well as ReoPro,

J&J's New Formula

The company's trademark is consistency, but it's making some big changes to kick-start growth.

ACQUISITIONS J&J's first big pharmaceutical deal since 1961—the \$4.9 billion purchase of biotech company Centocor—gives it a promising arthritis drug. Analysts expect more buys.

R&D MAKEOVER After a string of embarrassing drug-development flops, J&J is tightening controls. That includes creating a committee to O.K. moving drugs along in testing. Drugs in the pipeline include a birth-control patch and an Alzheimer's treatment.

FACTORY FIXES J&J is closing 36 plants, nearly one quarter of its total, for an annual savings of up to \$300 million.

a heart drug, and Remicade, a drug for Crohn's disease. If Remicade, as expected, is also approved by the Food & Drug Administration for rheumatoid arthritis, J.P. Morgan & Co. analyst Michael N. Weinstein figures it could add more than \$300 million to J&J's top line by 2001.

Shoring up the product lineup will become even more critical as J&J faces a major threat to the \$2.1 billion anemia drug Procrit, which it licensed from Amgen Inc. in 1985. Late last year, an arbitration panel decided the deal didn't give J&J the rights to a next-generation Procrit that Amgen has in the works. If Amgen begins selling the new drug in late 2000, it is expected to eat into existing Procrit sales. J&J is developing its own new version, but is about a year behind Amgen.

If the folks at J&J are worried, they don't show it. And Larsen vows that the recent changes demonstrate the company learns from any missteps. "I can't recall the last business we got chased out of," he says. The more J&J embraces change, the better its chances of extending its growth streak another 100 years.

By Amy Barrett in Philadelphia

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GETTING A GRIP ON BACTERIAL SLIME

Science has declared war on biofilms, which play a part in 65% of all infections—and resist antibiotics

In 1684, a dry-goods merchant named Anton van Leeuwenhoek discovered what he called “animalcules” in the tartar on his teeth. A thorough cleaning with vinegar killed only those “on the outside of the scurf,” or dental plaque. Intrigued, Leeuwenhoek, the inventor of the microscope, took a closer look. In the “scurf,” he found a sticky layer of bacteria that resisted the vinegar. It was one of the first glimpses of what are now called biofilms—bacterial “communities” that can appear almost anywhere, fouling machinery, clogging pipes, and contributing to many forms of human disease.

Researchers have found that biofilms play an important role in many medical conditions, such as kidney stones, chronic ear and urinary-tract infections, and gum disease. Experts at the Cen-

ters for Disease Control & Prevention in Atlanta now believe biofilms are involved in 65% of all human bacterial infections. And roughly 5% percent of the patients who annually receive catheters and stents develop serious infections from biofilms growing on the devices.

Biofilms also can be found on the hulls of boats, in water filters, and in drinking-water pipes, where they can do great harm. Worldwide, industries spend \$7 billion annually on toxic chemicals that are only partly successful in blocking this bacterial scum.

CONSPIRACY. The sheer havoc wreaked by these adhesive troublemakers is spurring scientists to look for ways to fight or prevent biofilm formation. Industry is using new, long-acting enzymes to dissolve the sticky glue that anchors a biofilm to a surface. Researchers are also avidly searching for blockers to inhibit biofilm formation. One novel class of compounds, called furanones, could be on the market within the year. Scientists are even beginning to unravel the genetic basis of biofilms. “The ultimate goal is to identify a biofilm’s pres-

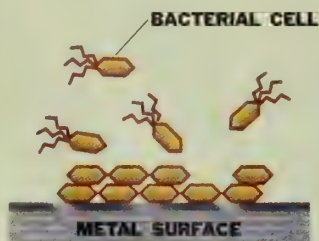
sure points,” says E. Peter Greenberg, microbiologist at the University of California College of Medicine.

At its earliest stages, this sticky thing called a biofilm is little more than a layer of cells attached to a surface. But as the bacteria grow and divide, something wondrously conspiratorial happens. When enough of them—a quorum—have gathered, they send signals around, telling each other to reorganize. They begin to arrange themselves into an array of pillars and mushroom-shaped structures, all connected by secreted channels that deliver food and remove waste. They become, in other words, not a simple collection of bacteria, but a spooky kind of communal organism, with its own defense capabilities and communication systems. “We used to think bacteria were pretty primitive,” says J. William Costerton, director of the Center for Biofilm Engineering at Montana State University, says wryly.

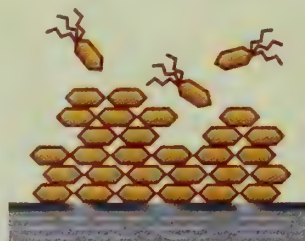
As the biofilm matures, the bacteria become as much as 1,000 times more resistant to antibiotics and microbicides than they were when separate. So

THE FORMATION OF A BIOFILM

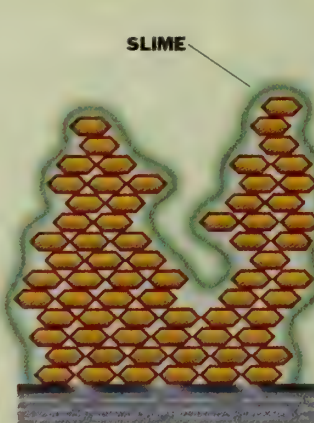
Biofilms occur when individual bacteria, in a way not fully understood, organize into a community that behaves like a single organism. Here’s how it happens:



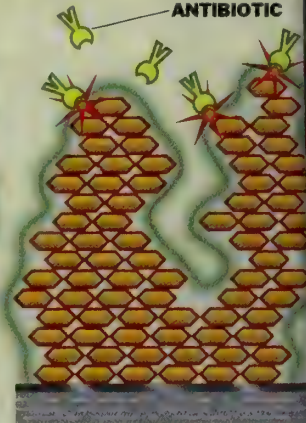
ATTACHMENT Bacteria fasten on to a variety of surfaces using specialized tail-like structures. This can occur in pipes and water filters, in the human intestine, and on implants such as heart valves.



EXPANSION The cells grow and divide, forming a dense mat many layers thick. The bacteria communicate with each other using specific signals. At this stage, the biofilm is still too thin to be seen.



MATURATION When there are enough bacteria in the developing biofilm—a quorum—the microbes secrete a sugary glue and form mushroom-shaped structures that look like futuristic cities.



RESISTANCE The glue protects the bacteria in the biofilm from the harsh environment outside, shielding them from antibiotics, toxic chemicals, and the body’s immune system.

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One approach to blocking biofilm growth would be to design compounds that interfere with the way bacteria signal to each other

A BLOWUP OF BIOFILM GROWING INSIDE A PLASTIC TUBE

a biofilm takes hold, getting rid of it is tough, if not impossible. Researchers believe the bacteria in the biofilm evade antibiotics by changing up to 40% of the proteins that make up their cell walls. Proteins that once served as the target of antibiotics may disappear, making the antibiotics ineffective. Even if the targets are still present, antibiotics and chemicals probably can't get through the biofilm slime to reach the microbes anyway. Costerton's group has shown that the gel-like substance secreted by bacteria in a biofilm acts like a coat of armor that is impervious to noxious chemicals.

One strategy for penetrating that armor was devised by the University of Iowa's Greenberg and collaborators at the Center for Biofilm Engineering. The team identified a substance that triggers biofilm formation in *Pseudomonas aeruginosa*, the bacterium that coats the lungs of more than 80% of all cystic fibrosis patients. This substance, belonging to a class called lactones, sparks a series of genetic changes—more than 40 in all—that instruct individual, free-living microbes to remodel their cell walls and begin spewing out slime.

DISRUPTION. Greenberg believes he can block biofilm formation simply by designing compounds that interfere with the signaling. He likens his approach to an army's attempts to make its military strike more effective by disrupting an opponent's communications array. "Here we are, taking out the bacteria's communication lines—making them more sensitive to the host immune system and traditional antibiotics," he says. Six months ago, Greenberg founded Quorum Sciences Inc. to market these compounds to makers of medical devices.

According to Costerton, it is likely that each bacterial species has its own version of the *Pseudomonas* lactone. He predicts it will one day be possible to develop inhibitors that target troublesome bacteria specifically—say, compound X to prevent *Staphylococcus* biofilms or compound Z for *E. coli* colo-

nizations. There may even be a signal blocker that is general enough to ward off all types of bacteria.

New research suggests this may be true. Staffan Kjelleberg and Peter D. Steinberg, two researchers at Australia's University of New South Wales in Sydney, have long been searching for ways to protect boat hulls and fishing nets from corrosive biofilms. They recently discovered a red-colored, salt-water plant called *Delisea pulchra* that is naturally resistant to biofilm formation. In just a few months they were able to isolate the plant's protective ingredient, called a furanone, from ground-up plant tissue. Now, Kjelleberg and Steinberg have chemically synthesized more than 60 furanone derivatives, all of which prevent the development

ent approach to identify new biofilm blockers. He's searching for the bacterial genes that control biofilm formation in order to make a detailed road map of the process. This knowledge, says Kolter, will be used to design new compounds that specifically interfere with their development. So far, his lab has identified 50 genes in *Pseudomonas* that could serve as targets for drugs.

JUMP OFF. Other approaches include the use of weak electric currents, which somehow pass through the slime to kill the bacteria by punching microscopic holes in them. But Greenberg and Costerton believe the answer to biofilm busting lies within the biofilm itself: there's a signal triggering bacteria to get on the biofilm bandwagon, why not a signal telling them to jump off?

Efforts are also under way to develop materials that biofilms can't stick to. Teflon equivalent for biofilms. Robert Bayston, a researcher at Britain's University of Nottingham, has created a polymer that contains small amounts of rifampicin and clindamycin, two powerful long-lasting antibiotics. In laboratory tests, catheters made of the polymer were able to repel large doses of bacteria—100,000 times the amount that would sicken a patient—for months at a time. To date, neurosurgical shunts made of Bayston's biomaterial have been implanted in more than 200 people in the United Kingdom. Britain's Ortho McNeil Pharmaceutical, which is the diagnostics division of Johnson & Johnson, and Cook Incorporated, a manufacturer of medical products in Bloomington, Ind., are developing their own versions of biofilm-resistant plastics.

More than 300 years after Leeuwenhoek's discovery of animalcules, biofilms are getting the attention they deserve. This past year, the National Institute of Health formed a coordinated program to bring scientists from diverse disciplines together to work on the problem. Thanks to a coordinated attack by engineers and biologists, new inhibitors are on the horizon. And there's even talk of vaccines to prevent chronic infections and dental disease. "We need to learn how to manipulate the critters in bothersome ways," declares Costerton. The war on biofilms has just begun.

By Ellen Licking in New York

HARMFUL AND DANGEROUS

Biofilms can appear almost anywhere, and they usually have undesirable consequences:

LOCATION	IMPACT
• Drinking water pipes	• Corrosion, disease
• Household drains	• Plugged-up sinks
• Dental plaque	• Gum disease, cavities
• Contact lenses	• Eye infections
• Catheters and stents	• Disease
• Ears	• Chronic infection
• Lungs	• Pneumonia

of biofilms. They are forming a company, Biosignals Inc., to develop them commercially. Kjelleberg believes these compounds could be used in a variety of settings—both industrial and medical. For instance, he envisions adding one or more to mouthwash to prevent biofilms from forming on teeth and gums.

Roberto Kolter, a microbiologist at Harvard University, is using a differ-



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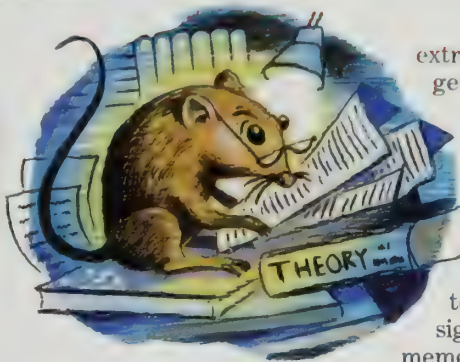
BY CATHERINE ARNST

USTACEAN -AID FOR VICTIMS

ARE MORE USES FOR than a good shore dinner. Researchers at North Carolina State University developed a biodegradable wound dressing for made from chitosan, a natural fiber extracted from crab shells. In tests on the three-layered bandage, the dressing protected the wound from bacteria as the inner layers were absorbed into the skin.

The dressings now in use can be regularly reapplied, and they don't disturb the wound. It can be quite painful if the dressing adheres to the dressing. Chitosan, used in the bottom layer of the new bandage, is easily absorbed by the human body, so it need not be removed. In fact, it acts as a cellulose-like scaffold on which new cells can grow. And because chitosan is known to resist fungi, microbes, and viruses, it actually speeds healing. At North Carolina State textile professor Samuel Hudson says the fiber also suppresses the growth of undesired cell growth, which causes scarring.

The second layer is made of a polymer that also degrades and becomes part of the skin. It has the consistency of cellophane and acts as a second line of defense. When the chitosan breaks down, the outermost layer is like a gauze that, like traditional dressings, is changed occasionally. The researchers presented their bandage at the American Chemical Society's annual meeting in August, said further research is needed to perfect the balance of moisture in the bandage to promote healing. They should have no trouble finding supplies. Chitin, the base of chitosan, is the earth's second most abundant organic source after cellulose. □



BUILDING A SMARTER MOUSE

A TEAM OF ACADEMIC SCIENTISTS has created a strain of supersmart mice by adding a gene that boosts their ability to learn and memorize. Plus, the mice's brains don't slow down as they age. The research, reported in the Sept. 2 issue of *Nature*, proves that genetic improvement of intelligence in mammals is feasible, say the scientists. In the near term, drug companies could try to develop memory-enhancing medicines that target that same gene in humans.

The smart mice—a strain named Doogie after *Doogie Howser, M.D.*, a TV show about a child genius—carry

extra copies of the NR2B gene, which controls the brain's ability to associate one event with another. The gene programs a protein called NMDA that serves as a receptor in the brain for signals associated with memory. The receptor needs two signals—such as a lit match and a sensation of heat—to create a memory. In young mammals, the NMDA receptor makes such connections very quickly, but it slows down after adolescence, and learning and memorizing become harder.

Princeton University neurobiologist Joe Z. Tsien and colleagues from Massachusetts Institute of Technology and St. Louis' Washington University bioengineered the mice with extra copies of the NR2B gene, designed to increase in activity as the mice age. Tsien says the Doogie mice were much better than normal mice at solving maze problems, learning sounds, and retaining knowledge, and their brains retained the biological characteristics of juvenile minds. □

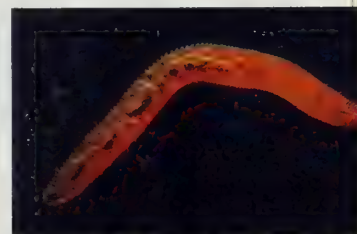
ROAD NOISE: TURNING DOWN THE VOLUME

HIGHWAYS CAN BE HORRENDOUSLY NOISY, AND THE CONCRETE and wooden buffers that cities build to dampen the din are often inadequate. Purdue University's new Institute for Safe, Quiet, & Durable Highways thinks better solutions to noise pollution may be found where the rubber meets the road. Armed with a \$3.6 million grant from the Transportation Dept. and matching funds from the auto industry and state governments, the Institute aims to reengineer both pavement and car tires.

This isn't the first such reengineering effort. More than a decade ago, tiremakers learned to reduce the high-speed whine of car tires on the highway by randomly varying the shapes and sizes of their treads. Purdue wants to go a lot further, though, and is studying some of the same tricks the U.S. Navy employs to cover the sonic tracks of its submarines—analyzing how the sound is generated, then nipping it in the bud. "Once we understand the sources of noise on roads, we'll find better strategies for making them quieter," says Institute Co-Director Robert J. Bernhard. *Neil Gross*

INNOVATIONS

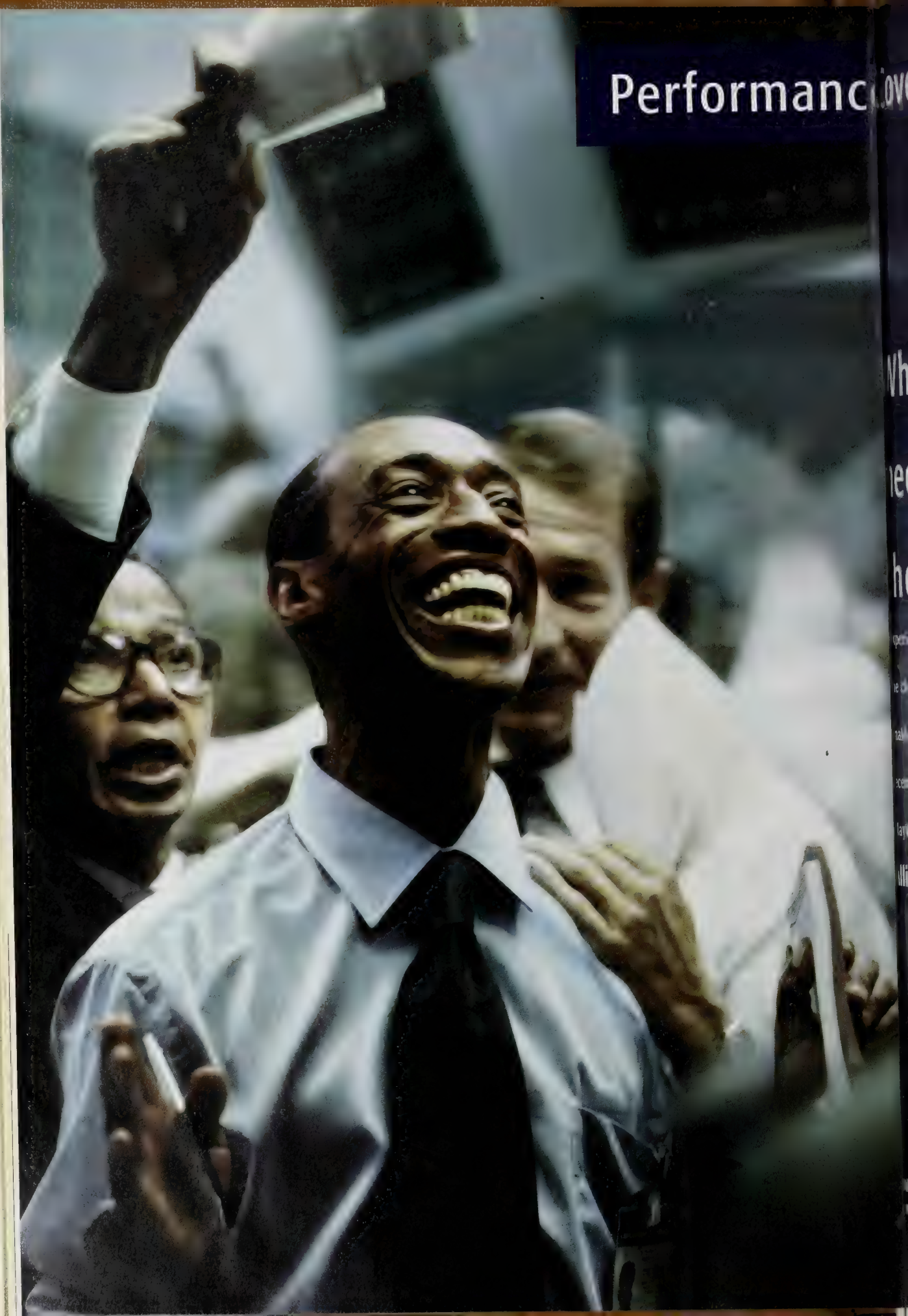
■ Nematodes of the world, run for cover. These microscopic worms cause \$100 billion in crop losses annually by viciously attacking the roots, stems, leaves, and even seeds of a broad range of plants such as cotton, soybeans, and corn. Federal inspectors are constantly on the alert for new and potentially harmful species in shipments of plants and wood products. Now, they are getting some online ammunition in their battle. The Agriculture Dept.'s Agricultural Research Service has created the USDA



Nematode Collection Search, an Internet database that contains information on more than 1,600 parasitic worm species from around the world. Check it out at www.nem.barc.usda.gov/database/search.cfm.

■ A new kind of foam made from graphite could lead to better aerodynamics in automobiles and lighter and more powerful laptops, says inventor James Klett of the Energy Dept.'s Oak Ridge National Laboratory. The black, spongy material, called Grafoam, is as effective as aluminum at dissipating heat but weighs about one-fifth as much. Radiators made of the stuff could be shrunk to half the size of aluminum ones, allowing them to be placed in the back of the car instead of the front. This could help car designers cut emissions and improve fuel consumption. Poco Graphite, a machine-parts and semiconductor manufacturer in Decatur, Tex., has licensed the technology and expects to begin production in 2001. *Ellen Licking*

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INVESTIGATIONS

TOO EAGER TO HELP CHINA?

Tips from Hughes and Loral may have led to better missiles



On Dec. 21, 1992, a rocket exploded 48 seconds after liftoff from Xichang Launch Center in western China, the first of a string of high-profile failures by Chinese rockets carrying U.S.-made satellites. The mishaps put China's nascent launch industry in jeopardy and set off a scramble by two leading U.S. satellite companies to save face—and save a business on which they depended.

Now, as the Justice Dept. studies whether General Motors Corp.'s Hughes Electronics unit and Loral Space & Communications Ltd. broke the law—and ponders whether to prosecute them—the satellite-export business is at a standstill.

The State Dept., the Pentagon, and a special House panel headed by Representative Christopher Cox (R-Calif.) have all concluded that the two compa-

nies gave Beijing analytical knowhow that could improve both commercial launchers and ballistic missiles, such as the Dong Feng-31, a missile with a 4,500-mile range that China tested on Aug. 2.

The U.S. companies also offered tips on fixing problems with welding and rivets, which they dismiss as low-tech matters. But “if you help someone figure out why the rocket does not work, that’s a violation,” says a government source familiar with the case. “It doesn’t matter whether it’s soldering or chewing gum.”

At first blush, it looks like an open-and-shut case for Justice: Hughes and Loral studied the launch failures and didn’t obtain separate State Dept. licenses to give their results to the Chi-

MILITARY MIGHT

Hughes and Loral differ as to how much assistance China really needed

nese. But prosecutors must weigh more than that. Hughes, for example, got approval from two key government overseers before it shared information with the Chinese. And while Loral contends that it helped the Chinese with a crash assessment, it says its actions were sloppy, not criminal.

If criminal charges are brought, many officials involved could face six years in prison. The companies could be subject to hefty fines, bans on high-tech exports, and a curb on sales to the U.S. government if Uncle Sam

decides to bring a civil suit, which several experts believe is the likely route if one is taken at all.

BITTER DISPUTE. Moving the case forward would also force America’s schizophrenic export-control policy into a dock. To promote U.S. satellite exports, Uncle Sam has—ever since the Reagan Administration—encouraged satellite makers to use Chinese launchers. But for national security reasons, Washington bars companies from assuring that the exports are reliable. Some control over satellite-export policy had been shifted from State to the trade-promoting Commerce Dept. by the Bush Administration. Under pressure from the satellite industry, the Clinton administration in 1996 completed the shift in control to Commerce. Last fall, the Congress toughened up the rules again by returning satellite-export licensing to the State Dept., which treats satellites as weapons.

It was State, however, that was in charge of licensing satellite sales for the first two of the three failed launches. When the in-flight explosion occurred in 1992,

part of the Hughes satellite on board never reached orbit. That fact led China to conclude that the rocket worked and the satellite was the problem. But Hughes blamed the fairing, the part of the rocket that shields the satellite in flight. The bitter dispute would last for years.

By April, 1993, Hughes officials learned from State that giving Chinese technical data about fairing flaws would require a new license. And it wouldn’t be granted if the data would help Beijing’s missile program. Still, finding the cause

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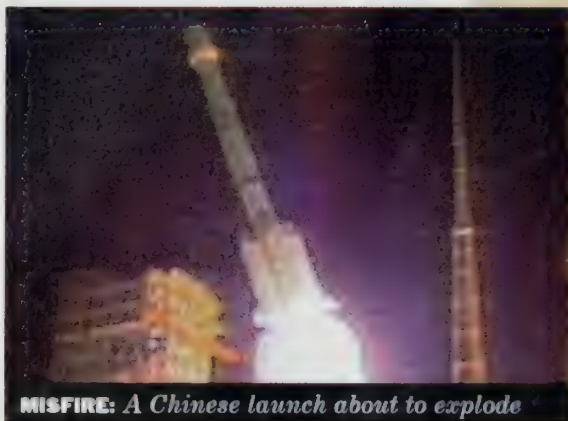
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MISFIRE: A Chinese launch about to explode

the explosion was crucial if Hughes and China were to satisfy insurers, who were fretting about the next launch.

Without the license, Hughes sent China faxes that contained recommendations for repairs. A June 25, 1993, fax that Hughes provided to *BUSINESS WEEK* suggested putting stronger rivets in the fairing and making other changes. A company spokesman says it didn't need a license because the faxes were approved by Air Force Lieutenant Colonel Allen D. Coates, then assistant for aerospace technology at the Defense Technology Security Administration and a launch monitor. Coates also O.K'd meetings between Hughes and the Chinese to discuss data on the flight's performance. Coates, now retired, doesn't recall the approvals, although he says his signature is genuine. While nontechnical data can be transferred, he notes that "any time you suggest a change to a piece of Chinese equipment, that's a no-no."

Despite arguments over the failed launch, China did in fact alter the fairing. But not enough. In January, 1995, a rocket with another Hughes bird on board exploded 50 seconds after launch. The incident rekindled the angry debate over who was at fault.

NO LICENSE. While this second launch was licensed by Commerce, Donald L. Leedle, then coordinator of technology-export controls at Hughes, told the Cox panel he understood that anything concerning the rocket still was in the State Dept.'s purview. But Hughes failed to get a license from State when it sought to share yet more information with the Chinese.

With a go-ahead from E. "Gene"



WAH LIM

AUGUST, 1995 A Commerce Dept. official approves transmittal of a launch-failure report by Hughes to China

FEBRUARY, 1996 A China Long March 3B rocket carrying a Loral Intelsat 708 satellite crashes

MAY, 1996 Under the direction of Wah Lim, then a Loral senior vice-president, Loral faxes a report on launch failure to China without government approval

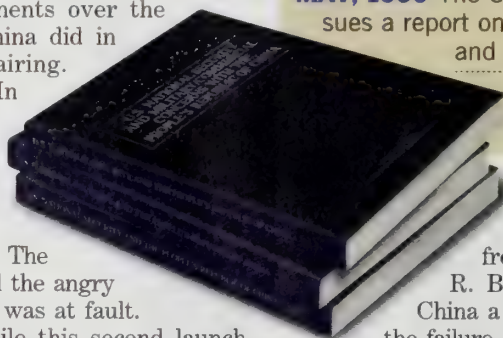
APRIL, 1998 A *New York Times* story says Loral and Hughes are under investigation for illegal technology transfers to China

OCTOBER, 1998 Congress shifts satellite export-license jurisdiction back to the State Dept. from the Commerce Dept.

MAY, 1999 The Senate Select Committee on Intelligence issues a report on satellite exports to China

MAY, 1999 The Cox Committee issues a report on Chinese espionage and satellite cases

DATA: COX COMMITTEE REPORT, *BUSINESS WEEK*



Christiansen, a Commerce licensing officer, and from his boss, Jerald R. Beiter, Hughes sent China a 106-page report on the failure. The confidential report, which *BUSINESS WEEK* obtained, points out shortcomings in China's diagnostic analyses. The report also says Hughes and Chinese engineers discussed analyses of payload behavior in Beijing. The Defense Dept. believes that information could be useful to the People's Liberation Army, particularly for launching military satellites. Procedures for analyzing launch failures could be applied to

ballistic missiles as well. Hughes report suggests China needed help. The company can't simply assume study states, that because Chinese "are in the business, they know their **HEFTY CLAIMS.** By the time the third failure—the February, 1996, crash of a rocket carrying a Loral-built Intelsat satellite—insurers had paid close to \$500 million in claims and China had lost all credibility. So insurance companies mandated a review of Chinese conclusion that defective guidance system was at fault. China asked L. Lim, then a Loral senior vice-president, to head the probe. A fluent Mandarin speaker whose family fled China to Singapore when Communists took

Companies Are Investigated For Aid to China on Rocket Launches
But Officials Say Administration Under Inquiry by Approving a Similar Deal
BY JEFF GERTH with RAYMOND BONNER
WASHINGTON, April 1—A Federal grand jury is investigating the technology needed to

Lim is a well-regarded engineer. He now works for Hughes.

Lim faced a tight deadline

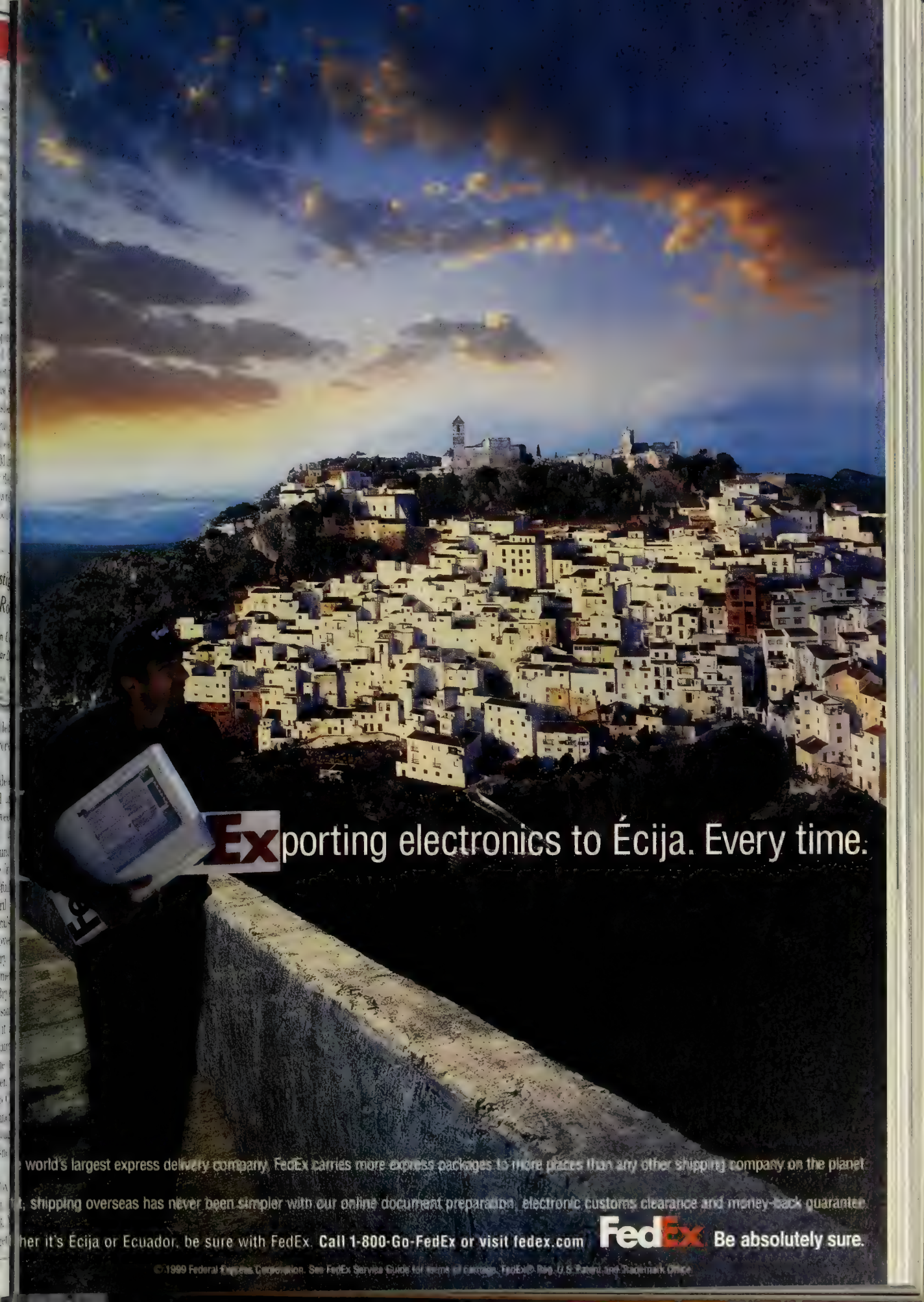
Loral needed an answer within weeks. It could decide whether to launch another satellite in China. (It successfully so.) At an April meeting of Loral's government-approved security advisory committee, panel member Stephen D. Bryer



CHRIS COX

technology-security consultant, said the company should contact State if a report were issued. But Loral claimed one told Lim, who was not at the meeting. By May 7, a report had been written, and Lim ordered it faxed to China. When Loral lawyer Julie B. Banner saw the report on May 9, she thought it might need State's O.K. But she was too late.

Lim declined to talk to the Cox panel after Justice rejected a grant of immunity. Lim's lawyer, George B. N. House Jr., says Lim is the target



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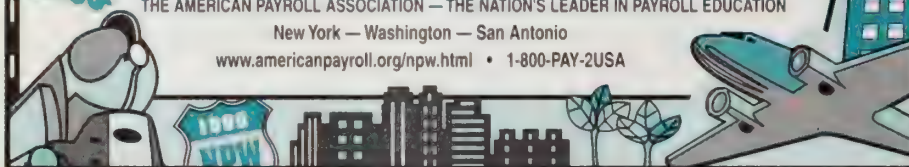
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Government

criminal probe but did nothing

The Cox panel and the compar agree about the importance of the report, which Loral declined to sh BUSINESS WEEK without govern permission. Loral does say that port merely agreed with China th guidance system was the pro That's all that was needed to ke surers on board because a diffi guidance system was to be used o next launch. To Loral, telling the nese after a crash that they had q control woes and should review all data was stating the obvious. "I know what the Chinese equiva 'duh' is," says a Loral official.

By pinpointing guidance problem, Loral may have help improve an ICBM

But the Cox Committee says pinpointed the defective part o guidance system—which could be a ed for use on the Dong Feng-31- helped with quality control, which could benefit the PLA. And some w whether Loral protests too much. June, it ran ads in major newspa proclaiming that it had voluntarily State about the transmission of th port. In fact, it made the disclosur ter government prompting.

Still, Justice may have difficulty suing the case: Twice in April, 1996, claims that it told government off about the launch probe and that th even requested a copy of the repor addition, on July 15, China said it solved the problems itself—and had held data from the Americans. In Loral contends that the Chinese so sophisticated that there was little could have learned from the U.S. (th this conflicts with the Hughes rep assessment of China's capabilities). upshot: Some analysts think it won easy to win convictions if Justice ahead with indictments.

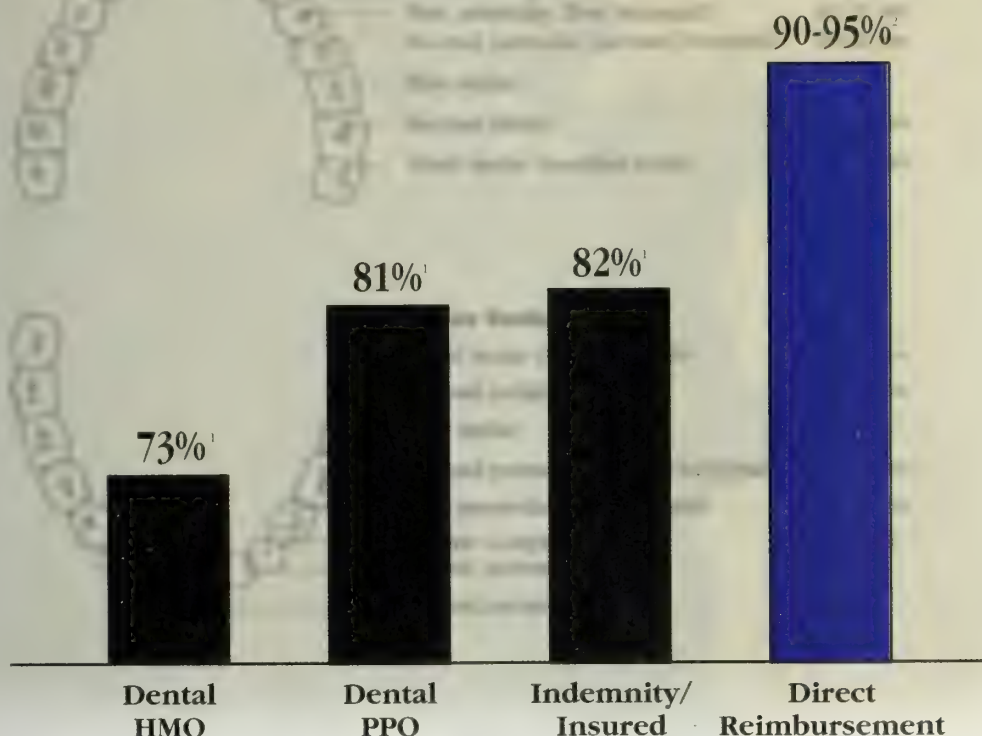
While the companies' legal fate is clear, what's not in dispute is that, the State Dept. in charge, the Amer satellite-export business is going where. The entire industry is alr paying dearly for the information, I ever valuable, that Hughes and I disclosed to the Chinese.

*By Stan Crock in Washington,
Steve Brull in Los Angeles*



American Dental Association

DENTAL CHART.



¹Source: National Association of Dental Plans

²Source: American Dental Association

Percentage of money that goes to actual dental care

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WHOSE INFO IS IT, ANYWAY?

A crucial fight looms in Congress over control of data like legal decisions, stock quotes, sports stats

Who owns *The New York Times* best-seller list? The answer may not be as simple as you think.

Last May, Amazon.com began offering steep discounts on *Times* best-sellers. Soon after, the *Times*, which has an exclusive deal with barnesandnoble.com, told Amazon it couldn't use the best-seller list without permission. In early June, Amazon sued the *Times*. Its argument: no one can own the fact that a particular book is selling lots of copies.

On Aug. 9, the online bookseller and the *Times* reached a settlement. Amazon can list the books in alphabetical order rather than by sales volume. But the deal does not settle the heart of the dispute

over who owns the data itself, and that question has become Exhibit A in a larger battle on Capitol Hill.

Legislation headed for the House floor this fall could determine whether companies in the Information Age can claim property rights to any of the factoids coursing through the Internet. If they can, prices might start rising for bits of data—whether it's a stat needed by a fantasy baseball player, a court decision used by a lawyer, or a scientific nugget used by a researcher.

Old-style database and newspaper publishers are lining up behind a bill that would give them more control over the information in which they've invested heavily. But Internet portals and online brokers that often use

such data to create products are fighting furiously against it. They claim that many simple facts might be exclusive assets of database owners. Says Peter A. Jaszi, a professor at American University's Washington College of Law: "Collectively, we are more in the way of useful new information products if the raw material remain available for use."

Maybe so, say database publishers, but where's the incentive to collect important information? Real-estate agents, for instance, say vast amounts of house-sale data on their Web sites can be easily lifted and posted on the pages of digital pirates. "The question is whether someone has the right to take your investment without compensating you," says Gail H. Littlejohn, vice-president of Lexis-Nexis owner Reed Elsevier.

London-based Reed Elsevier and Toronto-based Thomson Corp. are heading the drive to protect data. They back a bill, introduced by Representative Howard Coble (R-N.C.), House Judiciary Committee, that would undo a 1991 Supreme Court decision. The court held that collections of facts, such as the phone book, aren't covered by copyright laws and that a database owner is protected only if there is "originality" in the way it arranges facts.

Coble's bill would make it illegal to copy parts of a database gathered "through the investment of substantial...resources." And the bill would



DATA WAR FLASHPOINTS

STOCK QUOTES Exchanges want the ability to keep quotes from fraudulent operators, but online traders such as Charles Schwab and financial services such as Bloomberg worry that the New York Stock Exchange would have monopoly control of quotes.

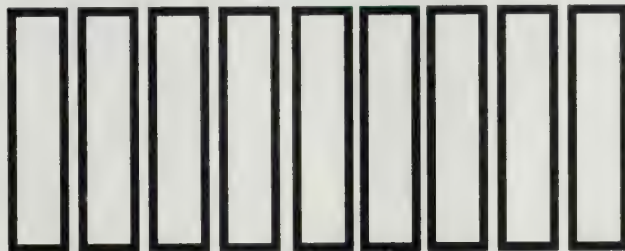
LEGAL DATA In 1998, an appeals court dismissed a case by Thomson Corp.'s West Publishing that claimed online publishers could not copy judicial decisions in West's legal directories.

BEST-SELLER LISTS *The New York Times* was sued by Amazon.com after the online bookseller was told it could not use the *Times* best-seller list without a license. A settlement avoids the underlying issue.

REAL ESTATE The National Association of Realtors worries that Internet postings of vast amounts of house-sale data from its multiple listings could be snatched by pirates, who could then demand referral fees from the original listing agents.

DATA: BUSINESS WEEK

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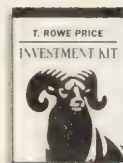
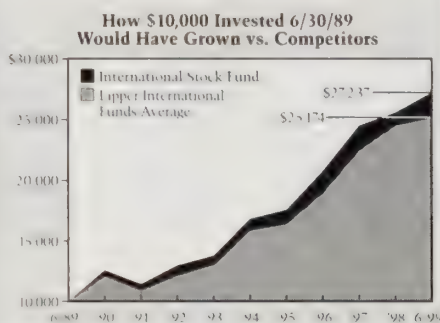
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Government

bid use of data in ways harming database owner's market. (The McGraw-Hill Companies, owner of Standard & Poor's financial databases and Business Week, backs the bill.) Aggrieved parties would be able to file suit.

A coalition of libraries, universities, and Internet companies argues the bill would cramp E-commerce by restricting their ability to reorganize into "value-added" products such as book reviews and reader comments that complement the *Times* best-seller Amazon. They back a bill approved by the House Commerce Committee Aug. 5. It would ban rival companies from reselling duplicates, or near-

Undisputed ownership of stock quotes would be a plus for the Big Board's planned IPO

copies, of existing databases. But database owners could only go to the Federal Trade Commission, not to courts, to seek relief.

One of the hardest-fought battles being waged over ownership of stock quotes. The New York Stock Exchange, which already charges traders for time quotes, says it's lobbying for the Coble bill to protect against fraudulent operators who could hack into systems and resell the information. But other brokers and financial-services companies say the bill would give the Big Board undisputed ownership of quotes. It would allow the NYSE, which plans to go public soon, to tout this huge asset to potential shareholders.

Bloomberg Financial Markets would like that exchanges could start charging for historical data, though the NYSE denies it intends to do so. And online brokers grouse that its traders, who are charged for every quote, already pay more than full-service brokers, who pay a flat fee. "No one can legitimately claim to own market data," says Carrie E. Dunne, general counsel for Charles Schwab Corp. "Investors and broker-dealers create these facts."

With so much at stake, lobbying has been intense. The NYSE invited Congress to ring the closing bell, and Charles Schwab has done some one-on-one lobbying at Capitol Hill. Odds are the battle will get more bruising as Congress attempts to reset the property lines in cyberspace.

By Susan B. Garland in Washington

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DYNASTIES

THIS IS NOT HIS FATHER'S COMDISCO



Second-generation CEO Nick Pontikes remakes the old-line computer company for the Internet Age

During a 1998 flight to Europe in Comdisco Inc.'s corporate jet, Nicholas K. Pontikes, then CEO-in-waiting, faced a grim decision: His father, Ken, who built Comdisco into a \$2 billion computer-leasing powerhouse, had died four years earlier. Now Nick, as Comdisco chief operating officer, was facing deteriorating margins in the mainframe leasing unit, once the heart of his father's company. He swallowed his emotion and recommended that Comdisco pull the plug. It's a move that would likely have troubled his father. But, says Pontikes, "I can't do things based on what [my dad] would have liked me to do."

After eight months as CEO, Pontikes, 34, is speeding up his bid to transform

his dad's old-line computer-leasing business into a cutting-edge services company that offers everything from high-speed Internet access to Y2K consulting. Last January, he announced the sale of his dad's mainframe division to IBM for \$485 million. Then, in March, he bought Prism Communication Services, Inc., an Internet-access and telecom company geared toward business customers, for about \$53 million; he is about to spend another \$400 million to roll out the service in 33 U.S. markets. And he's hard at work polishing up Comdisco's humdrum equipment-financing image by readying a new logo and advertising campaign.

FINDING FOCUS. Comdisco, based in Rosemont, Ill., will now be increasingly focused on such high-margin markets as providing software and desktop consulting, managing networks, and overseeing Web sites for big corporate clients such as Charles Schwab Corp. and Caterpillar Equipment Inc. Currently, services make up just 14% of revenues, with the rest coming from

specialty computer leasing businesses that Pontikes retained, such as equipment for the healthcare and electronics industries. But he predicts services will grow to 50% of revenues by 2001. Wall Street is already banking on that. With earnings projected to rise 9%, to \$164 million, for the fiscal year ending this month, on revenue of \$3.5 billion, Comdisco shares have risen 57% over the past 12 months, outperforming the performance of Nasdaq.

Matching his father's business accomplishments, however, won't be easy. Pontikes has entered a hotly contested marketplace. Comdisco, which had been No. 1 independent equipment-leasing player, now must contend with the likes of AT&T and PC giant Dell Computer Corp., both of which have spent years developing consulting services for corporate clients. "There's a lot of wood to chop between here and victory," says Thomas H. Patrick, a board member

COMING HEY
Pontikes left Wall Street behind



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since the elder Pontikes founded the company 30 years ago.

For starters, Pontikes needs to show he can do more than just sign deals. Says James E. Schrager, University of Chicago professor of entrepreneurship who has followed Comdisco for 20 years: "When you see a CEO buying and selling, you have to ask if he's putting together a strategic group of companies or simply putting on the latest clothes that Wall Street says to wear."

LOOMING LEGACY. Pontikes has no doubts that he is up to the challenge and says he often draws on his father's example. Certainly, his father's legacy still looms large. Kenneth N. Pontikes, whose portraits and bronze bust adorn Comdisco's headquarters, started the company in 1969 with a \$5,000 loan, after he figured he could make money selling used computers. Over the years, he built it from a one-person shop on Chicago's South Side to a booming outfit with 2,000 employees.

It's hard to miss Ken's visage in young Nick's face. They share the same prominent nose, strong chin, and easy smile. Their gestures are similar, and like his father, Nick cares little about fashion. His usual work attire is a polo shirt and khakis. But one thing the father and son almost didn't share was working together at Comdisco. Leery of going to work for his dad, Nick decided early on to forge a career of his own, despite pressure to join the business. He landed an internship at junk-bond powerhouse Drexel Burnham Lambert in 1985 and dropped out of the University of Illinois after his junior year to work full-time on Wall Street.

Pontikes now says he has no regrets about leaving school and prides himself on the 20-hour workdays he routinely put in first at Drexel and then at Blackstone Group. "He had all the tools and was a young star," says former Drexel boss Dean C. Kehler.

A brief and troubled stint running his own small investment bank, though, made Pontikes think again about joining up with his dad. So in 1992, when Comdisco's No. 2 executive, "Uncle Jack" Slevin, cornered Nick at his sister's wedding, pressed a finger in his chest, and commanded: "Hey you, now's the time," Nick agreed.

His first job was shoring up the company's floundering disaster-recovery di-

vision, which managed data networks that kept big banks' systems running in the event of a catastrophe. He let go of seven managers to streamline decision-making and rejiggered the company's commission structure to encourage sales staffers to sign up longer term contracts. The moves propelled the unprofitable

company in 20 seconds," Nick r. "He'd shoot holes in them." In respect, Nick admits his father almost always made the prudent call.

Pontikes, who votes most of the stake in family-owned Comdisco since he became a kind of CEO-in-waiting, his father died of colon cancer in

1994. While heading the disaster recovery division, Nick was promoted to the president's executive team and groomed until he became chief operating officer in November, 1997. When Pontikes assumed the chief executive post, little more than a year later, it wasn't hard for long-timers to accept the new boss. Nick played in the hallways as a kid, and besides, the family had always controlled a major stake in the company. Today, Pontikes' son runs human resources and his daughter is on the board.

Now, a big part of Nick's job is explaining to the older Comdisco board members, most of whom are over 50, the urgency of moving fast in the age of the Net. "It was complicated technology," the Prism Communications CEO says. "It was complicated technology and he expressed it [simply]. Kash recalls. "I thought: 'He's got it.'" Indeed, for Pontikes, like many others in his generation, technology is intuitive. He loves constantly playing with electronic gizmos to relieve tension or to listen to Pearl Jam on the latest handheld digital music gadget. Toys such as little wind-up flip saucers and an oversize golf ball now litter the same 11th-floor office his father once occupied.

GROWING UP. Still, Pontikes, 30 miles to go before demonstrating he's a fully formed leader. Most of the past four years, Slevin has been nearby to monitor younger Pontikes' every move. Tact and communication, moreover, are virtues he has yet to master. He forgets that colleagues look to him for guidance while speeds through important preparations. "We often tell him to

down," says board member Patrick. "It's a combination of youth and enthusiasm."

Pontikes isn't worried. Just as his father saw a great business opportunity in his day, Nick is convinced he can see Comdisco will ride the Internet boom. The way he sees it, working in the family business is like watching the "fuzzy glow" of his father's memory can only help guide the way.

By Roger O. Crockett in Chicago



JUNGLE FEVER: Son and father on safari

NICHOLAS K. PONTIKES

BORN 1964, Chicago, Ill.

EDUCATION William Fremd High School. Studied finance at the University of Illinois, but dropped out to take an entry-level job at Drexel Burnham Lambert.

CAREER GOALS Says he dreamed of being a garbage-truck driver when he was 5 years old. Later refined his focus to becoming a Wall Street investment banker.

CURRENT JOB Chief Executive of Comdisco, a computer leasing and services company his father founded in 1969.

VALUE OF PONTIKES FAMILY HOLDINGS IN COMDISCO \$838 million

FAVORITE PASTIMES Hunting cape buffalo while on safari in Africa; watching Chicago Cubs games from the bleachers; cooking, especially his homemade Italian sausage.

FAVORITE BOOK *A Soldier of the Great War* by Mark Helprin

FAMILY Married with two daughters, ages 1 and 3. Nick and wife, Gwen, expecting third child this month.

business into the black. "The disaster-recovery turnaround was Nick's success," says Rick Kash, another veteran board member. "He created his own equity."

Today, Nick cherishes the experience, recalling how he was able to learn from his dad. The two would often kick around business ideas, Ken listening as much as advising his only son. "I'd have a bunch of ideas about how to fix the

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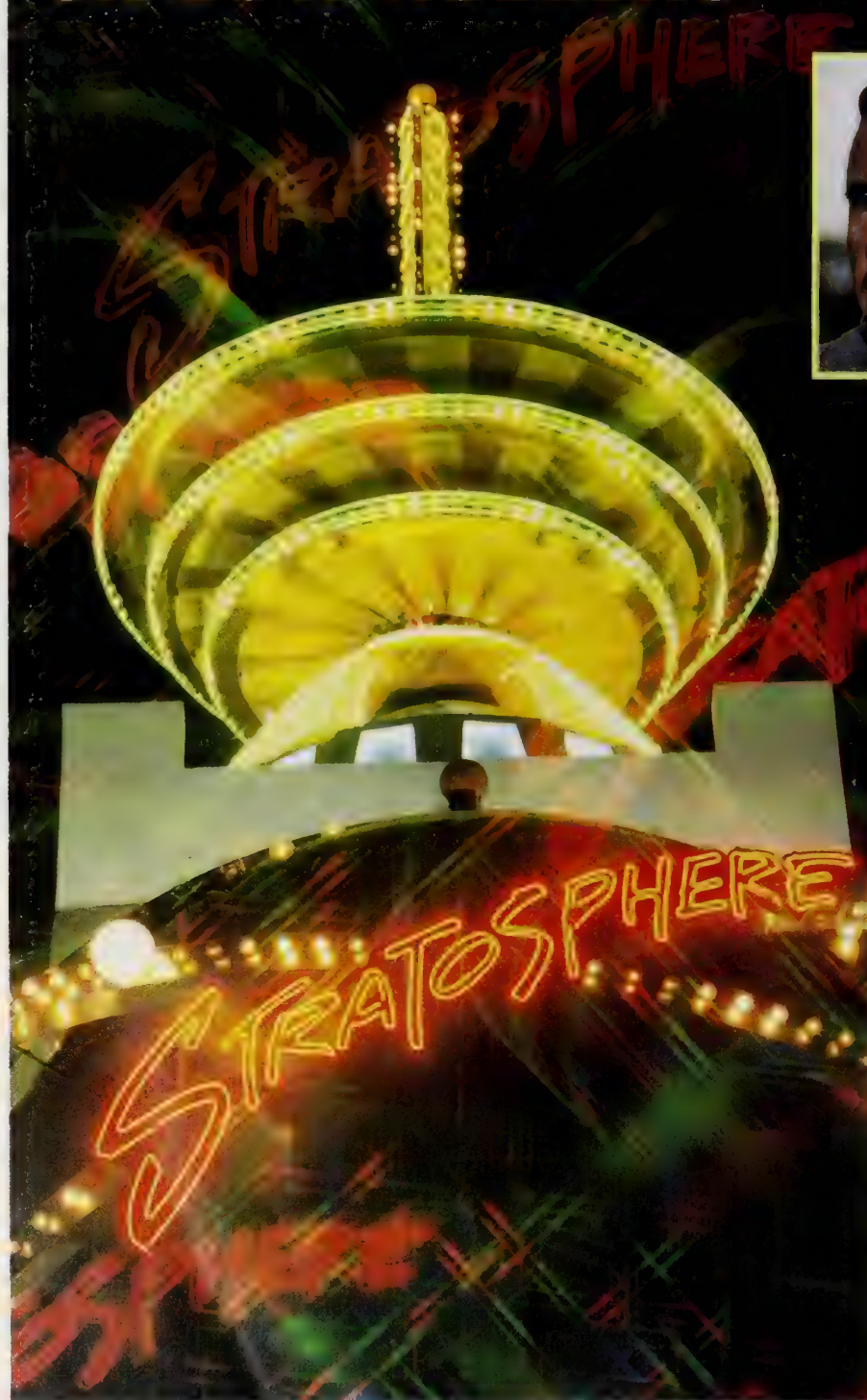
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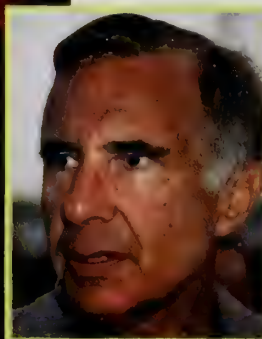
DEALMAKERS

ICAHN'S BIG BET ON LOW ROLLERS



Are there enough budget gamblers out there to make his mini-empire of ragtag casinos pay off?

Carl C. Icahn has always loved other people's trouble. So, soon after the Stratosphere casino and hotel headed for bankruptcy court in 1997, just nine months after opening at a cost of \$550 million, Icahn sensed an opportunity. The famed bottom-f



shelled out \$61 million to buy the Stratosphere's junk bonds at fire-sale prices. The move eventually enabled Icahn to wind up with 80% of the casino and a 36-story hotel—a roller coaster on the Strip.

The Stratosphere is a prominent feature of the fast-rising Las Vegas skyline. But it is also a sleazy part of the Strip known for its gambling and drug deals, and from the hottest casinos. Yet Icahn, the

year-old onetime corporate raider, waged more than a dozen high-profile takeover battles in the 1980s, is making it the flagship of a ragtag gambling empire he has been quietly assembling over the past two years. Where he once valued after the likes of Texaco, USX, and TWA World Airlines, these days Icahn is getting such properties as the downstate 258-room Arizona Charlie's Hotel Casino, which he picked up for an estimated \$39 million, according to industry insiders.

FLAGSHIP: *The Stratosphere is in bad part of the Strip*

BANKRUPTCY HOUND. It may not be glamorous, but there's logic to Icahn's backdoor entrance into the booming gaming industry. Like others, he's riding the strong economy and consumer spending with cash to burn. But rather than spend billions on huge projects, Icahn is betting he can lure the masses with low-fare junkets. His strategy: fix up his threadbare casino holdings into a destination for budget-conscious vacationers. Icahn, who declined comment for this story, is even getting into the travel business to help his plan along.

The deals are classic Icahn, albeit on a vastly smaller scale than those of the '80s. In the case of Arizona Charlie's, Icahn bought bonds pledged against a Missouri casino company that failed. To get it out of bankruptcy, its owners swapped the profitable Arizona Charlie's for

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bonds. In Atlantic City, Icahn has snatched up roughly one-third of the bonds issued by the Sands Hotel & Casino and Claridge Casino Hotel, two neighboring casinos that are both in bankruptcy court. Some believe Icahn may soon combine the two casinos. "That's how Carl likes to do it," says Dan R. Cassella, CEO of Stratosphere Corp. "Buy things on the cheap and get the efficiencies out by cutting costs."

Still, that doesn't quite explain what a billionaire dealmaker is doing snapping up second-rate joints that only a low roller could love. To be sure, casinos are hardly Icahn's only investments. His publicly traded real estate investment trust company, American Real Estate Partners, with assets of \$1.2 billion, owns properties as diverse as an East Hampton (N.Y.) development and a Canadian garbage hauler.

TOUR GUIDE. But Icahn figures he can make real money in gaming. To help fill his casinos, he has also launched a Web travel agency. In April, Lowestfare.com Inc., 79% controlled by Icahn, filed for an initial public offering in hopes of raising \$91 million. The online service will offer discount packages to the Stratosphere and other Icahn properties. And it will get folks to those places for prices that won't make much of a dent in their gambling stakes. Icahn, who headed TWA from 1985 to 1993, left the airline with the right to buy more than \$600 million in airline tickets at deeply discounted prices. He plans to use those tickets by offering huge discounts to anyone willing to gamble at his casinos. "If he decides to become a big tour wholesaler, he might be able to turn all of this into a real business," says Saul F. Leonard, a Los Angeles hotel-and-casino consultant.

Icahn's low rolling doesn't always win.

He was recently outbid for Desert Inn, the faded former hangout of Frank Sinatra and Howard Hughes that was bought in May for \$275 million by South African casino operator Sol Kerzner. And resurrecting the downtrodden casinos he has won't be easy or cheap.

In the six months since Icahn assumed control of the Stratosphere, revenues have fallen by 7% even as the rest of Vegas has enjoyed a huge resurgence. To turn it around, Icahn wants to build 1,000 new rooms, an \$80 million investment.

Known for his quick investment flips, Icahn seems to be into gaming for at least a while. In July, he turned down an estimated \$80 million from Station Casinos for Arizona Charlie's, which would have given him a fast

\$10 million return. His own pet haunt has so far been the swankagio, where industry sources say he has a \$1 million credit line. "People think of him as a raider," says Jeff Silver, lawyer in the Arizona Charlie's case. "But he really seems to like the business."

Icahn certainly knows his way around the gaming tables. Raised in Queens, N.Y., he played chess as a child with his father, a lawyer and casino owner. But after graduating from Princeton University, then dropping out of medical school at New York University, he became an avid poker player during his stint in the U.S. Army, according to earlier published accounts. When he got out of the service, Icahn went to work in the early '60s as a broker for Icahn & Co. Inc.

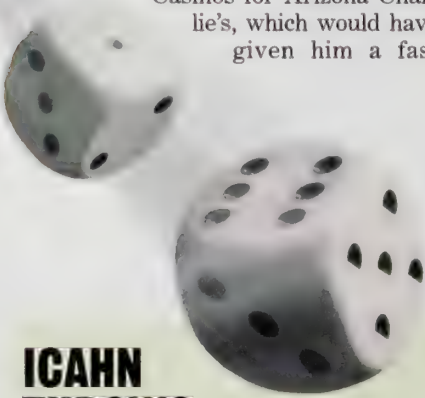
EARLY WINS. Not long afterward, Icahn used \$4,000 in poker winnings to start his own options business and began publishing a stock-tip sheet. In 1968, he had launched Icahn & Co. and made huge gains by selling stock options. He had accumulated back to such companies as American Can and Owens-Illinois. That set the stage for his notable

decade as a 1980s raider.

Icahn is unlikely to ever make as much money as his collection of casinos and real estate sets as he did in the 1980s. The newest, flashiest places in town are in style, and as long as people have extra cash, they usually go where they can blow it, industry analysts say. That's why Icahn nosed on the Strip route, gutting five-year-old gambling palaces only to build bigger and snazzier ones in their places. Consider the Stratosphere's California: "Every time someone new opens on the Strip, we get killed."

But Icahn is convinced that even in the age of throwing their money away, many consumers will prefer to do so gamely. That's why his collection of what look like everyone else's bets in the game of flash cash may turn out to be anything but. If not, else, they prove that Icahn loves long odds.

By Ronald Grove
Los Angeles



ICAHN THROWS THE DICE

THE STRATOSPHERE (Las Vegas) Opened to great fanfare in 1996, the glitzy \$550 million casino has struggled because of its heavy debt and poor location. Bonds that Icahn purchased in 1997 converted to an 89.6% equity stake in a 1998 bankruptcy restructuring.

ARIZONA CHARLIE'S (Las Vegas) A seedy hangout for locals. Icahn gained control of it after the parent company's 1998 bankruptcy restructuring. The 258-room motel and casino generates \$60 million a year and makes a profit.

SANDS HOTEL & CASINO (Atlantic City) A downscale operation that caters to day-trippers from up and down the East Coast. Bonds owned by Icahn and his affiliates should yield a 33% equity stake in the wake of a 1998 bankruptcy filing.

CLARIDGE CASINO HOTEL (Atlantic City) Near the Sands, this 502-room hotel for middle-income gamers has been in the red since 1993. It filed for bankruptcy on Aug. 16. Thanks to bond holdings, Icahn and his affiliates could get a 40% equity stake in the restructuring.

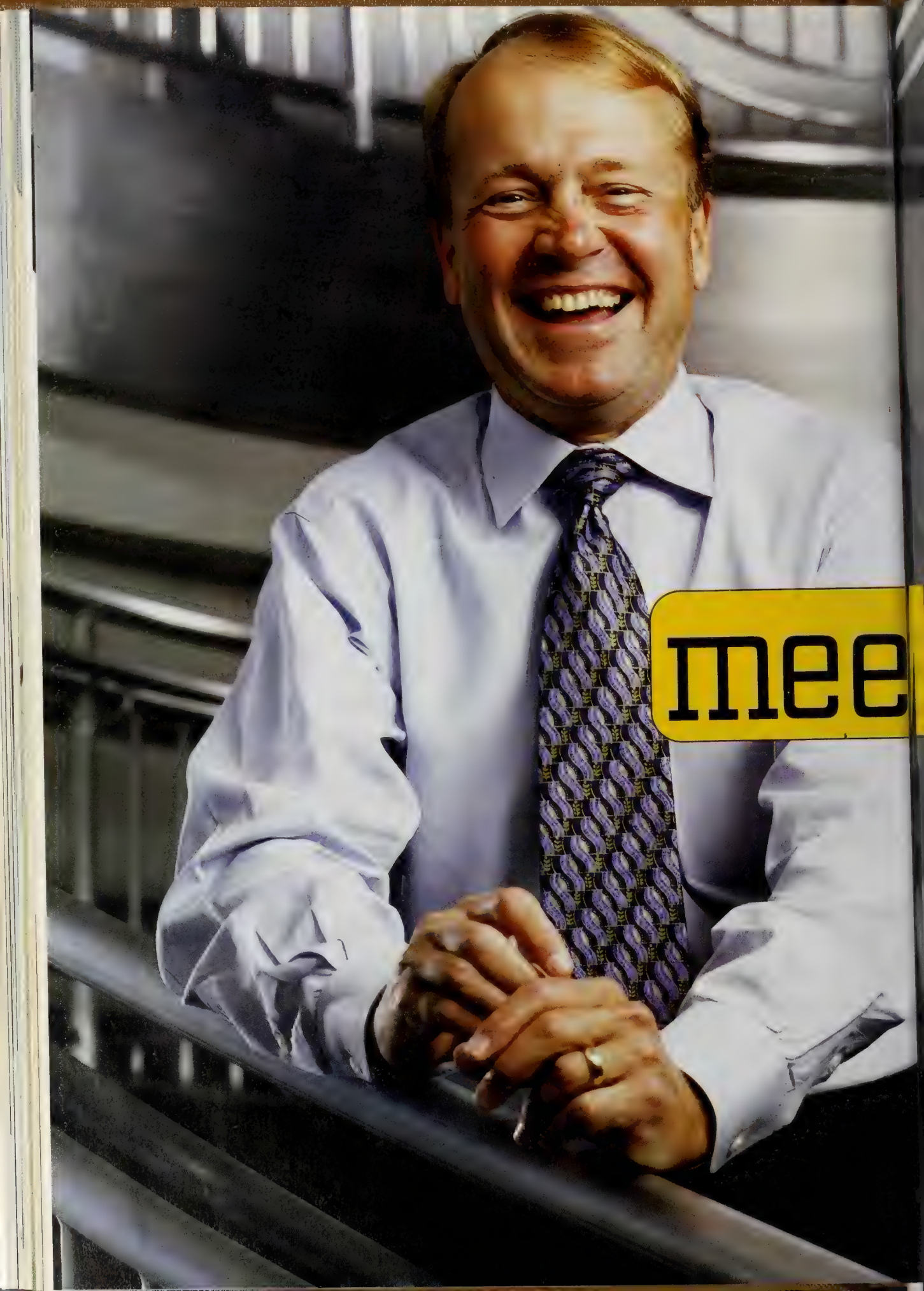
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Last May, John T. Chambers, the chief executive of networking giant Cisco Systems Inc., sat down during a swank technology conference near Laguna Beach, Calif., for a get-to-know-you with Carl Russo, CEO of the hot telecom-equipment startup Cerent Corp. After a few pleasantries, Chambers got right to the point: "How much would it cost me to buy you?" he asked, wearing his trademark ear-to-ear grin. "How much would it cost for you to leave us alone?" shot back a smiling Russo, an ambitious entrepreneur who had his eye on an initial public offering this fall.

In the end, it seemed no price would dissuade Chambers. On Aug. 26, Cisco agreed to pay a staggering \$6.9 billion in stock for Cerent, even though the two-year-old startup has sold only \$10 million in gear. The hypercompetitive Chambers simply would not go away. Convinced that Cerent's technology is critical for linking the Internet and telephone-system worlds, he restarted talks 10 weeks after first meeting Russo. By Aug. 13, Chambers had agreed to match Cerent's expected lofty IPO value, but Russo still had one hang-up: He wanted security for his 285 employees.

out the stops for one of the 40 acquisitions Cisco has made to help it be the biggest supplier of plumbing to the Internet, he's pushing others to figure out how to better use the Web. His hawking is incessant. One day, he's preaching Net religion to Chinese President Jiang Zemin, and the next he's meeting with six geeks in a garage who are noodling over a new networking technology.

Chambers is on the same near-maniacal rip for Cisco to be the ultimate model of an efficient Net company. Today, the company sells 78% of its gear over the Net, speeding up the process and wiping out costly and needless steps between order-taking and

Cover Story

delivery. This streamlined way of doing business has saved the company a cool \$1.5 billion over the past three years (page 140). And Chambers isn't shy about evangelizing just how the Net can do the same for every other company. "What Bill Gates is to PCs, John Chambers has become for the Net," says Philip J. Lawlor, chairman of Internet service provider AGIS Inc.

MR. INTERNET

Cisco Systems CEO John Chambers has a vision of a New World Order —with Cisco as its No. 1 supplier

To seal the deal, Chambers made a stunning concession: He told Russo that all personnel decisions about Cerent's workers would be made jointly by the two executives—forever.

What else would you expect from the Internet's No. 1 salesman? More than any other individual, Chambers has become the champion of a New World Order where the Internet is the crucial backbone for all communications and business transactions around the globe. If Chambers isn't pulling

Indeed, these days Chambers is spinning a vision of an Internet future that's as far-reaching as the "information at your fingertips" mantra that Microsoft Corp. Chairman Gates divined a decade ago. According to Chambers, there will be a day when a "New World Network" will seamlessly blend the technology of the Internet with high-speed optical fibers, cable, and wireless systems to carry voice and data everywhere. Voice calls will be free, and people will think nothing of zipping off

CHAMBERS: "If we do it right, we have the chance to become one of the most influential companies in history"

ALAN LEVENSON

huge chunks of data for everything from video E-mails to movies on demand. With Cisco's dominance in networks that handle corporate data, Chambers thinks his company can become the top supplier for the New World Network. "If we do it right, we have the chance to become one of the most

would drop most of its own networking products to sell Cisco equipment instead, a deal that could add as much as \$7 billion to Cisco's top line over the next three years. Torrid growth, coupled with rich profit margins, has pushed Cisco's stock up more than 2,300% over the past five years compared with about 200% for the Standard & Poor's 500-stock index. That gives the company a market capitalization of \$220 billion—the fifth-highest in the world.

TECTONIC SHIFT. Now Chambers faces his biggest test yet in bringing about the New World Network. To reach his goal of tripling Cisco's sales over the next decade, he must muscle his way into the \$225 billion market for telephone equipment, where the company now has less than a 1% share. To do



that, he will have to best less and more experienced rivals such as Canadian giant Nortel Networks Corp. and Lucent Technologies Inc., the high-tech former equipment arm of AT&T. Both have earned

trust from telephone companies over decades by supplying the rock-solid gear on which the world's phone networks are built. And both are beefing up their offerings to include more Internet technology: Nortel merged with Bay Networks in 1998 and Lucent bought Cisco rivals Ascend Communications and Nexabit Networks earlier this year. "We can bring reliability to end-to-end solutions that others can't match," says Daniel Stanzione, Lucent's chief operating officer.

What Cisco and its rivals are preparing for is a tectonic shift in the com-

Cover Story

influential companies in history," he says.

Not that Cisco is a slouch today. Since becoming CEO five years ago, Chambers has steered the company's explosive growth from \$1.3 billion in revenues in 1994 to \$12.2 billion for the fiscal year ended July 31. And Cisco's not likely to slow down: Analysts figure its sales will grow 37% this year, to \$16.6 billion. On Aug. 31, IBM said it

BUILDING JOHN CHAMBERS' NEW WORLD NETWORK

Cisco may rule in corporate gear, but it's a relative startup in the telephone world where it faces an uphill battle against the likes of Lucent and Nortel



BIG CORPORATIONS

The heart of Cisco Systems business is selling equipment that directs data around big corporate networks. Today, corporate gear makes up 55% of Cisco's \$12.2 billion in revenues. A big boost is coming: On Aug. 31, IBM said it will resell more Cisco gear, which should add \$6 billion to \$7 billion to Cisco's sales over three years.

CISCO'S MARKET SHARE

40% of the \$16.5 billion market.

PRIMARY COMPETITORS Cabletron Systems, 3Com, Nortel Networks.

HOW CISCO STACKS UP King of the hill. Cisco is No. 1 in every category of corporate gear—and getting stronger because it's the "safe" purchase. Cisco uses IBM-style account control to keep customers in the fold.



SMALL AND MEDIUM BUSINESSES

Long ignored by most suppliers, small and medium businesses are now the fastest-growing market for corporate data-networking equipment. Cisco has launched an aggressive push into the field, lining up new distribution channels and hundreds of resellers. Chambers spends 10% of his time overseeing the initiative, and it's likely to grow to about 20% of revenues next year from 15% now.

CISCO'S MARKET SHARE

18% of \$13.6 billion market.

COMPETITORS 3Com, Intel, Nortel, Alcatel.

HOW CISCO STACKS UP Cisco aims to be the leader in gear for smaller businesses. But strong rivals like 3Com make it unlikely that Cisco will dominate.



INTERNET SERVICE PROVIDERS

Today, 80% of the Internet's routes, which direct data to the right destination on the Net, come from Cisco. The company also is strong in sophisticated data switches—often faster alternatives to routers. And it has gained ground in gear for linking individuals and companies to the Net.

CISCO'S MARKET SHARE

33% of the \$9 billion market.

COMPETITORS Lucent, Nortel Networks, 3Com, Juniper Networks.

HOW CISCO STACKS UP Its name is synonymous with the Internet, but Cisco faces tough competition. Startups are churning out zippier routers. Lucent and 3Com dominate Net access. And Cisco has only 21% of the data-switch market. Even so, this is Cisco's fastest-growing business.



nications industry. Today, voice calls are sent over super-dependable telephone networks that are quite expensive, while data traffic is zipped through the less reliable Internet that, by comparison, is dirt cheap. What customers want is the best of both worlds: a single inexpensive network that's reliable enough to handle voice with enough capacity to meet the most rigorous demands of data. Using Internet technology to carry voice calls should lead to huge cost savings for customers and a flowering of all-new ways to communicate.

Cisco is betting that Cerent will help it get an edge in building the converged network of the future. Cerent gives Cisco equipment aimed at the heart of telephone networks where signals are zapped over hair-thin optical fibers. Cerent's technology weaves together voice and data traffic and zips it onto those optical fibers more efficiently than anything else on the market. The deal is a shot aimed especially at Nortel, whose optical systems carry the bulk of

INFO TECH 100 COMPANY

Net traffic. Although it's the largest deal Cisco has ever done and some Wall Street analysts think the valuation borders on the absurd, it could pay off. Analysts buy Cisco's estimates that Cerent will bring in \$300 million in sales next year and at least \$2.5 billion in 2002. "Cisco will do extraordinarily well," says analyst Chris Stix of SC Cowen Securities Corp.

Even if Cerent is a winner, Chambers and his team will have to watch his back. A host of newcomers are wooing Cisco's traditional customers—corporations and Internet service providers, which use Cisco's routers and switches for directing data to their proper destination. Scrappy upstart Juniper Networks Inc. is starting to eat into Cisco's core market with a souped-up Internet router that's faster than Cisco's best. And Nortel is winning contracts from the likes of British Telecommunications and Australia's Telstra. Vows Nortel Executive Vice-President F. William Conner: "We're going to stick it right to Cisco."

Leave it to Chambers to bring out

PHOTOGRAPH BY ALAN LEMMON

TELEPHONE COMPANIES

As data and telephone networks converge, Cisco wants to transfer its dominance from the Net into the phone world. It has beefed up its products to carry voice and bought a handful of telco startups. Its \$7.4 billion acquisitions of Cerent and Monterey Networks could move it deeper into the heart of big phone networks.

CISCO'S MARKET SHARE Less than 1% of the \$225 billion market.

COMPETITORS Lucent, Nortel Networks, Alcatel, Siemens, Fujitsu.

HOW CISCO STACKS UP New kid on the block. Cisco's Net-based technology will revolutionize the world's phone networks, but it won't happen overnight. Telephone companies trust Lucent and Nortel more because of their proven reliability.

CONSUMER NETWORKING

Hard to imagine, but the market for networking gear in the home could top \$4 billion by 2002, from almost nothing in 1998. Cisco has licensed its technology to consumer-electronics giants like Sony so their products will work best on Cisco networks.

CISCO'S MARKET SHARE 10% of the under \$250 million market.

COMPETITORS 3Com, Intel, Nortel.

HOW CISCO STACKS UP Cisco has invested in several startups developing home-networking technology, and its list of licensees is a Who's Who of consumer-electronics companies. But 3Com and Intel are hell-bent on the same market, and they've got better name recognition and distribution. Analysts expect consumer products to be only 1% of Cisco's sales next year.

DATA: PRUDENTIAL
SECURITIES,
CHAMBERS IN-STAT
GROUP

JUST A TREE BEING PLANTED

PROFITS & PRINCIPLES

There was a time when oil and gas reserves seemed endless. But with the world's population continuing to increase, and developing countries seeking energy at exponential rates, fossil fuels will eventually fade. And so, the likely question is: will oil companies just sit there and fade as well?

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BORN Aug. 23, 1949, Cleveland

CHILDHOOD The only son of two West Virginia doctors, Chambers grew up in comfort in Charleston, W. Va. The future Cisco CEO says he developed an early interest in business by working in the motel and restaurant his father, John Turner Chambers, owned on the side.

CEO TO BE: Dyslexia made him work hard

demics. He attended Duke University and West Virginia University as an undergraduate. He earned a law degree from WVU in 1974 and a business degree from Indiana University in Bloomington in 1975.

READING Chambers admits that he hates to read. He likes everything boiled down to one-page summaries or short presentations. He compensates, however, with a quick mind and sharp memory.

CAREER He was lured into sales by an IBM recruiter who told him that selling was about spinning a dream for customers. After six years at IBM, Chambers moved to Wang, where he spent eight years in senior sales management. He learned a key lesson from Wang's fall and the layoff of workers. "Never make the mistake of

that kind of vitriol from competitors. He frequently refers to Lucent as an "Old World" communications company—a charge Lucent executives consider not only inaccurate but a childish taunt. Nortel, for its part, complains that Cisco intimidates customers who are considering rivals' equipment by threatening to cut back on product support. Chambers denies the charge, but the image of him as a bully is indelible. "Cisco's competitors hate the company—I mean, really hate it," says Shannon Pleasant, a networking analyst with researcher Cahners In-Stat Group.

To rise above the acrimony, Chambers is adopting the role of industry statesman. He has frequent meetings

EDUCATION Though not a bad student, Chambers had a reading problem and never loved aca-

thinking you're infallible."

HEROES GE's Jack Welch and former Hewlett-Packard CEO Lew Platt.

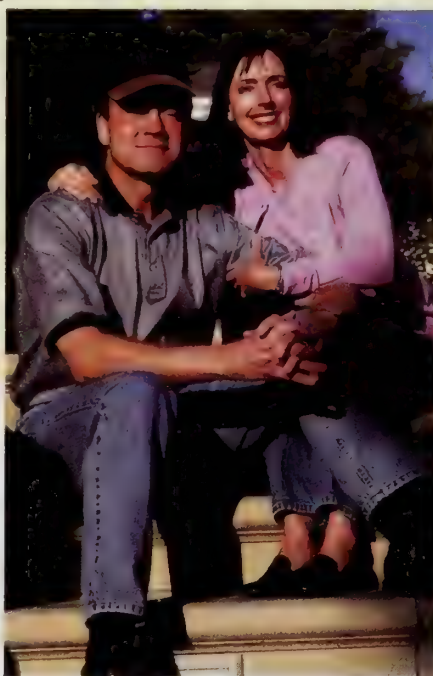
FAMILY Married 25 years to Elaine Prater. Two college-age children, a son and a daughter.

ESCAPES He jogs three times a week, which gives him time to sort through tough business problems. Plays doubles tennis weekly with his wife and friends. Goes on an annual weeklong fishing trip with his father and son, both of whom are also named John.

BAD HABITS Butterfingers, buttered popcorn, fried chicken. He talks a blue streak and retells the same stories.

INDULGENCE He bought himself a \$22 million Dassault plane. He doesn't pilot it himself but uses it for business travel.

FAVORITE SAYINGS In the Internet Economy, Chambers says, "the big won't beat the small—the fast will beat the slow." And he always greets his managers by asking: "Are you having fun?"



WITH ELAINE: Chambers left Duke to be closer to his college sweetheart

hours jawboning about the Internet with George W. Bush, whom he supports for President. "Chambers works tirelessly to proselytize the new network economy," says L. John Doerr, partner at Silicon Valley venture-capital firm Kleiner Perkins Caufield & Byers.

Blair and Jiang are pretty heady company for a guy who was raised in Charleston, W. Va. Chambers grew up in a close-knit family, the eldest child of two doctors. With his two sisters, he would often vacation at Carolina beaches and spend summers at a nearby camp, catching frogs and trout. Although Chambers' parents didn't pressure them



WITH YOUNG JOHN: On one of their annual fishing trips

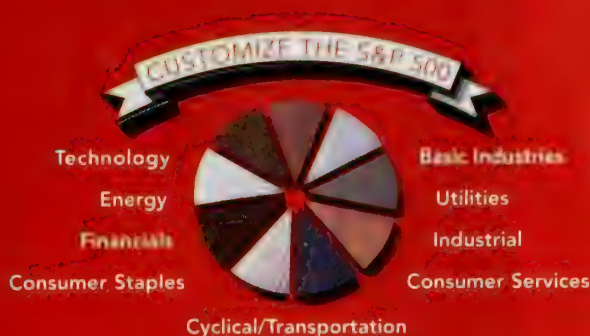
to succeed, all three children clearly understood the importance of achievement. One sister became a nurse, the other a teacher, and both are married to doctors.

It was from his father that the future Cisco CEO inherited his interest in business. The senior Chambers, also named John, dabbled in businesses on the side, and John tagged along to work odd hours at his father's motel and restaurant. John also saw his father as something of a visionary. A story Chambers loves to tell is about how his dad understood that consolidation was coming to the medical field before most of his colleagues. In the 1970s, the elder Chambers spearheaded the merger of small hospitals in Charleston, though their boards opposed the deal. "My dad had the ability to see what things were headed," says Chambers.

"LAUGHED AT." The younger Chambers also grew up with a disadvantage: dyslexia. It pushed him to work harder than most. He had a mild form of dyslexia that made reading difficult, and he needed two years of tutoring to catch up to elementary-school classmates. The experience fed his drive to succeed. "I was laughed at for being a slow learner,"

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at the White House and hobnobs with Washington insiders during their pilgrimages to Silicon Valley. In the past year, he has met more than 30 heads of state, including China's Jiang, British Prime Minister Tony Blair, and Australian Prime Minister John Howard. And earlier this summer, he spent two



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says. Even now, he dislikes reading and never does it for pleasure. But like many dyslexics, he compensates with a remarkable memory: He recalls virtually everything he hears in meetings and always talks without notes during his dozens of public speeches each year.

To this day, Chambers prides himself on the family values he learned growing up. For 40 years straight, he and his father, whom he calls his best friend, have taken an annual, weeklong fishing trip that now includes his 19-year-old son, also named John. He has been married to his college sweetheart for 25 years. And despite his frenetic schedule, he reserves Sundays for his family: He blew off schmoozing customers one Sunday at the 1998 U.S. Open golf tournament in San Francisco, which Cisco was sponsoring. And he skipped a meeting with President Clinton to attend the birthday party of his daughter, Lindsay.

After getting a law degree from West Virginia University and an MBA from Indiana University, Chambers was recruited into sales at IBM. He still recalls what his interviewer told him: "You're not selling technology; you're selling a dream." Chambers was smitten by the pitch, and he spent six years at IBM, drinking up the company's legendary sales and service philosophy. "He learned good lessons there—to deflect the discussion away from technology and toward business issues," says Prudential Securities Inc. analyst Luke C. Szymczak.

While Chambers became a star at IBM, he felt stifled by Big Blue's bu-



LOYAL TROOPS: Senior managers are rich enough to quit any time—but they like the exciting atmosphere Chambers created

recreative, Chambers had to lay off thousands of workers—an event that friends say scars him to this day. "Everybody has a defining moment," says George "Duf" Sundheim, an attorney and Chambers' weekly tennis partner. "He never wants to do that again."

When a former Wang colleague called him in 1991 about a job at Cisco, Chambers jumped at the chance—even though the company had just \$70 million in sales. From the start, Chambers was groomed for the top spot by then-CEO,

now Chairman John P. Morgridge. "The job was his to lose," says Gary Daichendt, Cisco's executive vice-president for operations, who worked with Chambers at IBM and Wang.

And lose it he almost did. Some members of Cisco's original management team thought Chambers was too much of a salesman to run such a technical company. "The board talked about having a bake-off or even going outside," Morgridge says. But Morgridge gave Chambers the chance to make more presentations to

the board to gain directors' confidence. Eventually, they were won over by the realization that to grow beyond its regional roots, Cisco needed better sales and customer support. That point was quickly driven home. Chambers was minutes late for his first board meeting as CEO because he was on the phone with a distraught user. "The board members were not happy campers when I arrived," Chambers says. "But when I told them why, they said I could not make that excuse anytime."

Cisco badly needed to improve its relations with customers. Like many startups, the company had an engineering-driven culture where the needs of customers took a back seat to the coolest new technology. Chambers flipped that relationship around. Today all the company's top executives have bonuses tied to customer-satisfaction ratings. "He's done a really successful job of making everybody in the company think they're salespeople," says Dell'Oro, president of market research firm The Dell'Oro Group. Cisco even made two acquisitions—Crescendo Communications Inc. and NetSpeed—because customers suggested them.

That underscores how much Cisco has become a reflection of Chambers, the salesman. His strength is not piecing through nitty-gritty details to determine which technologies will dominate in

Cover Story

reaucracy. The final blow came when a manager counseled the eager young salesman in a review that at IBM, the path to success lay in promising three goals and meeting them all. Chambers, the manager said, made the mistake of promising 10 goals, meeting nine of them, and falling flat on his face on the 10th. "That's when I knew it wasn't the place for me," Chambers says.

He defected to Wang Laboratories Inc., then a high-flying maker of minicomputers that threatened the dominance of IBM's mainframes. He stayed eight years, through its meteoric rise and ignominious fall. Near the end of his tenure, after becoming the top sales ex-

CISCO'S STOCK ROCKETS

The S&P 500's top growth stocks over the past five years

	YEAR TO DATE
DELL COMPUTER	9,402%
CISCO SYSTEMS	2,356
SUN MICROSYSTEMS	2,304
QUALCOMM	1,646
CHARLES SCHWAB	1,634
EMC CORPORATION	1,233
MICROSOFT	1,168
TELLABS	1,036
SOLETRON	926
INTEL	900

Total return for the five years ended Aug. 31, 1999

SOURCE: BLOOMBERG FINANCIAL MARKETS

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future. Rather, Cisco listens to its customers and often buys whatever technology they think they want. Critics say the result has been a whipsaw product strategy, and even Chambers concedes that some acquisitions have failed be-

Cover Story

cause of fickle customer demand. Still, he thinks he has a winning formula: Rather than focusing on gigabits and megahertz, Chambers builds lasting relationships with his customers.

JUST CALL Take his courting of a Silicon Valley startup. When cable Internet service provider Excite@Home Corp. had just six employees in 1995, Chambers himself showed up to pitch the business. William R. Hearst, a Kleiner Perkins partner then acting as @Home's CEO, was stunned that Chambers came personally. And when Excite@Home gave some of its business to rival Bay Networks, Chambers came back and offered the startup the same terms as Cisco gave its biggest clients. Cisco ended up with all the business.

Chambers is still pushing hard. At a lavish event for customers last December in Florida, complete with fireworks and Beatles impersonators, he spent the evening working the crowd with his folksy charm. He focused particular attention on Bruce D. Parker, the chief information officer of United Airlines parent UAL Corp., because Parker uses equipment from Nortel. "Chambers won't give up," Parker says. "He just keeps trying, and someday, I may give him some business." With all customers, Chambers gives out his personal phone number and urges them to call anytime. "He'll take a phone call at 2 a.m.," says Cisco Vice-President Daichendt.

What drives Chambers more than anything is the simple fact that he hates to lose. "John Chambers is the single most competitive person I know," says John W. Sidgmore, vice-chairman of MCI WorldCom Inc. and the head of its UUNET Internet unit. "He is incessant." On a recent Cisco executive retreat in Alaska, for example, Chambers and his top managers took off in two-person dingies. When a torrential rainstorm hit, Chambers didn't want to turn back and risk losing a contest to catch the most fish, so he and Barbara Beck, Cis-

co's vice-president for human resources, stayed in their boat for eight hours, returning to dock near 6 p.m. The rest of his team, it turned out, had thrown in the towel at noon and were waiting for him at the lodge.

A day in a downpour may seem like nothing compared to what lies ahead. To become a serious player in the telecom-equipment market, Cisco has to build relationships with a whole new set of customers and earn their confidence. So far, Chambers has gotten a foot in the door with AT&T, MCI World-

part of the contract to supply gear for Sprint's highly acclaimed Integrated Demand Network, or IDN, a schedule blend both phone and Net technology into speedy access to the Web. But tel was always the primary supplier of IDN. And because Cisco had to be meeting some deadlines, Sprint is doing Nortel even more business. But he would not comment specifically on the deal, says marketing chief Conner, "having a very good year with Sprint on our data products." Cisco Executive President Don Listwin denies there's

significant technical problems.

Cisco's investments in equipment for telephone carriers have been problematic, too. Conner says its second-largest acquisition, the \$4.4 billion purchase in 1996 of StrataCom, which made data switches for use in large networks. Cisco is now using the switches to Net voice providers and emergency phone companies. But some national phone operators continue to buy them from Nortel, Newbridge Networks, and Lucent Communications, which is now part of Lucent. Now Cisco appears to be backing out from StrataCom-type deals, known as ATM switches. It has canceled one product and delayed another.

"NEXT WAVE." Chamberlain says Cisco is walking away from ATM but concedes the company's focus is shifting to ATM, a decade-old technology that remains popular with phone companies, dices phone calls and Net data into data cells that zip across a phone network's optical fibers. Chambers believes that the communications world will move Net data directly onto optical cables, eliminating the go-between.

That's where Cerent comes in. The company's technology efficiently handles the link

tween Net gear and fiber optics. Conner figures the market for Cerent equipment could grow from \$4 billion now to \$10 billion by 2002 and that Cisco, depending on its execution, can take 25% to 70% of it. "Optical is the next wave. This is a breakaway moment for us," he crows. Analysts think he's onto something. With the communications revolution under way, says research analyst Dell'Oro, "the door is open to suppliers like Cisco who might have had the slammed on them in the past."

That's critical to Cisco's future. The company is moving from the \$28 billion

THE TECH INDUSTRY'S COOKIE MONSTER

Cisco Systems has made an art of gobbling up smaller companies with hot technology and management talent. Since 1993, it has acquired 40 startups for a total of nearly \$20 billion.

Here are several key deals.

COMPANY/DATE	PRICE	REASON FOR DEAL
CERENT CORP. August, 1999	\$6.9 billion	Hot startup's gear is super-efficient at moving voice and Net traffic onto high-speed optical fibers. That should help Cisco become a key supplier for the core of phone networks.
GEOTEL COMMUNICATIONS April, 1999	\$2 billion	A big step for Cisco into the software business. GeoTel makes software that manages corporate phone networks and call centers.
SUMMA FOUR July, 1998	\$116 million	Purchase of this manufacturer of innovative phone switches gave Cisco its first foothold in the telephone equipment market.
STRATACOM April, 1996	\$4.4 billion	To get into the market for speedy data switches, Cisco snatched up StrataCom. Revenues have grown, but a push into the phone market has yielded mixed results.
CRESCENDO COMMUNICATIONS September, 1993	\$89 million	This deal to flesh out Cisco's networking lineup became the model for future acquisitions. Revenues from the business unit today: \$3 billion.

DATA: COMPANY REPORTS, BUSINESS WEEK

Com, and Sprint Corp. But Cisco isn't winning much business from the big local phone companies. That's largely because they're not convinced the firm can deliver the reliability that Lucent, Nortel, and others are known for. Changing their minds won't be easy: Lucent, for instance, has more sales and support people in the field than Cisco has employees, and matching that would wreak havoc on Cisco's juicy 28% operating margins.

The company's early forays into the market have offered sobering lessons. Cisco tooted its horn loudly when it won

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data-networking market that's growing by 15% a year into the \$225 billion telecommunications-equipment market, parts of which are growing by 50% annually. The company has scored big wins

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with emerging carriers in telecom, including Qwest Communications International Inc. and Level 3 Communications Inc. Chambers says he expects to make even more headway. The IBM deal should help open doors for Cisco at tele-

phone companies. And Cisco has set up a new business unit of experts to help consultants understand how to roll out E-commerce systems for their clients. The company, for example, is investing \$1 billion in KPMG Peat Marwick so it can add 4,000 Cisco-trained engineers.

Chambers thinks Cisco's acquisition strategy is just as key to its success. In buying 40 companies since 1993, the company has made a science of absorbing new technology and engineering talent. Indeed, Chambers has built his top management team from the ranks of acquisitions, and he claims Cisco's annual em-

ployee turnover is 6.7%, vs. the try's 18%. But critics gripe that hasn't invented anything significant the router and uses acquisitions crutch—spending 13% of revenue R&D, largely to stitch together required technologies.

Critics aside, Chambers' strategy has been paying big dividends. So much that Cisco's directors unanimously to sign him up for another five years CEO. They're certainly sold on the Internet's No. 1 salesman.

*By Andy Reinhardt
in San Jose, Cal.*

THE MAN WHO HONES CISCO'S CUTTING EDGE

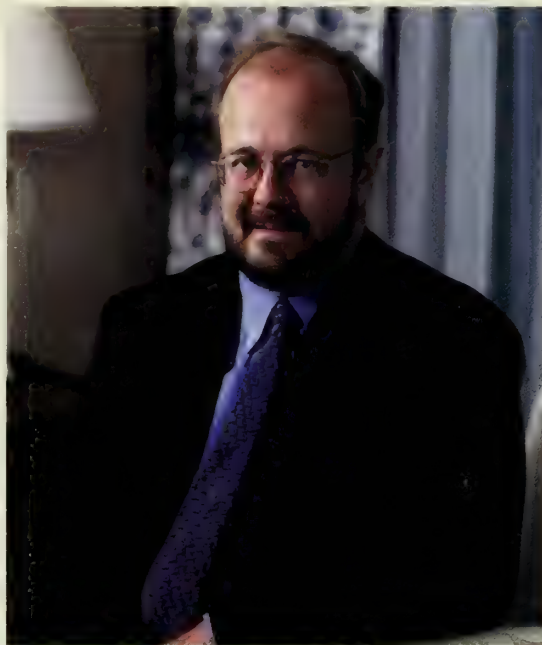
Since joining Cisco Systems Inc. in 1993, Peter A. Solvik has been working almost nonstop. The company's chief information officer has replaced every computer and every piece of software at the company—not once, but three times. He has installed complex financial and manufacturing software and built state-of-the-art Internet programs that give every Cisco employee, customer, and supplier instant access to its vast storehouses of data.

That may sound like a nightmare, but the overhaul has given Solvik a starring role in the Internet Economy. With a strong mandate from Cisco CEO John T. Chambers, the 41-year-old Solvik has revamped Cisco's operations around Net technologies and created a blueprint for how other companies can do the same.

The results are dreamy: Cisco gets 78% of its orders over the Net—some \$30 million worth every day. Thanks to a Web site that's chock-full of information and free software, a remarkable 80% of customer-service issues are handled electronically, shaving millions off product support costs. Cisco's aggressive use of networking and E-commerce has boosted revenues per employee by 20%—to some \$650,000 for each of its 19,000 employees. That compares with an average \$396,000 for the S&P 500, and \$253,000 for archrival Lucent Technologies. And the company has cut \$1.5 billion in costs in the past three years. "Customers come to us and ask 'How can we get that?'" Solvik says.

It wasn't that long ago that Cisco

knew nothing about such E-engineering. When Solvik joined the company after a stint running online businesses for Apple Computer Inc., he found a mishmash of computers and an isolated tech group that was treated as



SOLVIK: Setting a standard for lean operations by using the Net

a cost center. He sacked most of the staff and got then-CEO John P. Morgridge to pump up tech spending. A year later, Solvik and Carl Redfield, vice-president for manufacturing, masterminded a top-to-bottom overhaul of Cisco's computers and software. It was a prescient move: Had Cisco kept its gaggle of systems, Solvik says, leaping into E-business would have been much harder.

The overhaul was barely done,

though, when a new tech wave hit Web browsers that made getting information off the Net far easier. Just three months after Cisco had finished installing its new corporate system in February, 1995, his team reworked

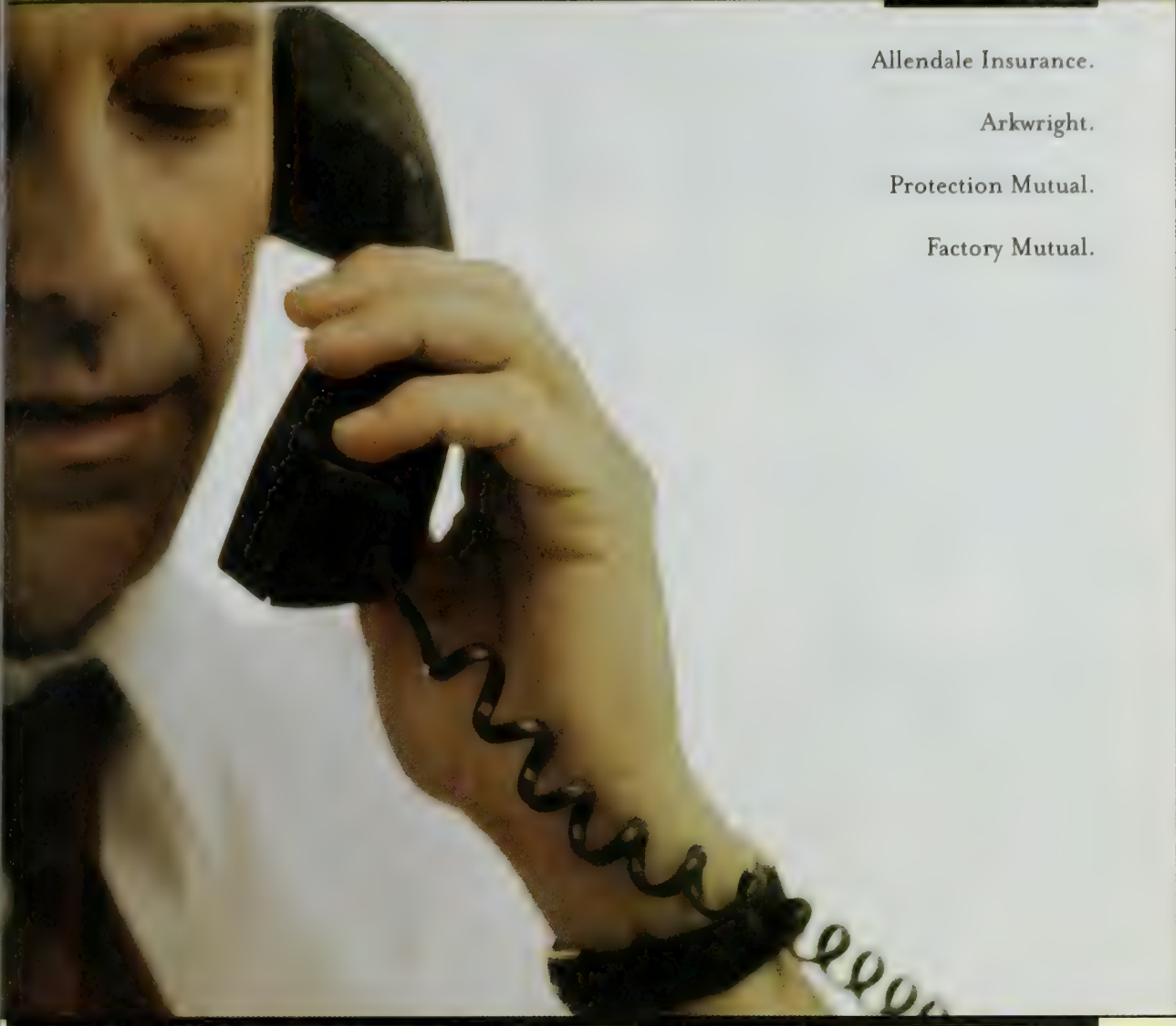
the software to allow access to browsers. Now every part of Cisco has been "Netized." Cisco recruits and screens job candidates over the Web. Managers can pull up staff records and information on competitors. And within a year, Cisco aims to become the first company in the world that can "virtually" close its books any day of the quarter to gauge financial results.

PAPER-FREE. The Net also is woven deeply into Cisco's manufacturing operation. The company outsources most of its products to manufacturers like Flextronics Inc., and half of customer orders placed on Cisco's Web site flow directly over the Net to contractors, who ship to the customer. For those orders, no Cisco employee ever touches a piece of paper until a check arrives in the mail to pay for the goods. Soon, with E-payment, even the check could become a thing of the past.

Chambers is so taken with the results that he has made

Cisco's E-business success story the heart of his sales pitch, since persuading other companies to mimic Cisco drives sales of its products. And for Solvik, he isn't resting on his laurels. He's now bent on setting up "virtual" Cisco teams that can work together around the globe, which could help cut overhead. Sounds like more nonstop work ahead.

*By Andy Reinhardt
in San Jose, Cal.*



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BANKING

A MEGABANK IN THE MAKING

BofA's McColl has yet to make his spending spree pay off

When Hugh L. McColl Jr. let longtime friend Reitzel Snider talk him into hiking through the Alps a few years ago, McColl was assured that it would just be a relaxing trek in the Swiss countryside—and nothing that would set off his acrophobia. “I promised him it would be like a page out of *Heidi*—rolling hills, flowers, cows, and yodelers in lederhosen,” recalls Snider, who now admits he was just relaying what he had been told by his Swiss hosts.

But for McColl, Snider, and the rest of their small climbing party, what was supposed to be a bucolic hike turned out to be a harrowing climb up the Jungfrau—one of the highest peaks in the Swiss Alps—that left the two novices at times wondering if they would live to see their families. The pair endured not only a terrifying 1,500-foot vertical climb up a glacier, but in McColl's case, leg cramps and hyperventilation attacks from the altitude, and an unnerving 100-foot slide that could have left him seriously injured.

As chairman of Bank of America Corp.—the \$614 billion megabank formed by the merger of McColl's Charlotte (N.C.) NationsBank Corp. and San Francisco's venerable BankAmerica Corp.—the feisty ex-Marine is still climbing heights that few bankers have ever experienced. Thanks to his savvy dealmaking, McColl stands atop a vast empire of 4,500 branches and 14,000 ATMs holding 8.6% of the nation's deposits—a cushy three percentage points more than the next contender, First Union Corp.

TREACHEROUS FOOTING. But like his Swiss excursion, McColl has found the footing far more treacherous than he expected 17 months ago when, on the day the merger was unveiled, he boasted, “Bigger is indeed better. We're not in any business we don't understand.” During the first year alone, McColl confronted a rash of defections, not just from the former BankAmerica but from

the Montgomery Securities unit that he had acquired the year before. McColl has also been tripped up by a \$372 million writedown taken on a hedge-fund deal initiated by the former BankAmerica management, as well as a bad bet on interest rates that has saddled him with more than \$2.4 billion in paper losses in his bond portfolio.

But for McColl and his troops, there's no turning back. And with just under two years left until retirement, the 64-year-old McColl is now facing the final hurdle he needs to secure his legacy: to tie his disparate acquisitions together and prove that he can deliver the elusive payoff from two decades of aggressive dealmaking. According to Salomon Smith Barney analyst Henry C. Dickson, Bank of America's operating income, on a per share basis, has grown by an average of 7.3% annually in the 1990s vs. the 10.9% mean of the 50 largest banks. That woeful performance has left McColl's stock lagging behind the rest of the industry (table).

Yet in some ways, the task facing McColl has become even tougher. While many past acquisitions succeeded largely on McColl's ability to slash costs, his latest deals for BankAmerica, Montgomery, and Florida's Barnett Banks Inc.—all among the largest and most expensive in banking history—will test McColl's mettle as a marketer, as he tries to generate new profits by cross-selling more products to his vast customer base. Yet some of McColl's longtime rivals remain unconvinced he can develop synergies from his latest acquisition. Edward E. Crutchfield Jr., chairman of crosstown rival First Union, noted in a recent broadcast to his employees that McColl is “going to have to find a model that is going to work, because just getting bigger as a traditional bank will not work.”

McColl readily acknowledges that it's a new ballgame—and that the massive buildup of the past two decades is mere-

“We must
redefine bank
and make the
bank work for
customers and
clients as no
other bank
before”

BofA HAS A LEADING SHARE IN THE MOST LUCRATIVE MARKET

	MARKET SHARE*
CALIFORNIA	19.6%
FLORIDA	23.3
TEXAS	12.9
WASHINGTON	20.0
ARIZONA	21.8
GEORGIA	14.2

*Percentage of all deposits

DATA: SHESHUNOFF INFORMATION SERVICES



ly a prelude for what lies ahead. Indeed, the man who struck fear into the hearts of rival banks—who worried that they were always one misstep away from being forced to sell to McColl—now vows that he has bought his last bank. “There are no deals left in my quiver,” McColl says, in an interview from his Charlotte headquarters office. “We’ve expended tremendous amounts of energy and money hammering together a franchise and not exploiting it. Our opportunity lies now with the customers we have.” That’s a message that McColl has drilled into his executives. “You don’t hear Hugh talking as much about size these days as about our return on equity,” says Michael J. Murray, president of global corporate and investment banking.

There’s a lot to exploit now: Thanks to his flurry of acquisitions, McColl has his foot in the door of more than 2 million businesses, including 85% of the 500 largest U.S. companies. Likewise, 30 million households—one out of every three homes—now have an account at Bank of America, a franchise that the ever-immodest McColl crows is “unmatchable.” So pervasive is BofA’s role now in the U.S. economy that the bank processes more than 25% of all checks, credit cards, and ATMs and other electronic transactions in the country—more than the Federal Reserve itself. When the merger dust settles, Bank of America “will become a major consumer banking powerhouse,” predicts ING Barings analyst Andrew B. Collins.

DYNAMO. It has been an extraordinary odyssey for McColl, a 5-foot, 6-inch dynamo who was steered toward Nations-Bank’s predecessor by his iron-willed father. McColl’s dad decided that he didn’t need Hugh’s help running the family’s small bank in rural Bennettsville, S.C. He would be proud now: Since taking the helm of the old NCNB in 1983, McColl has acquired more than 50 Sunbelt banks—and still displays their charters outside his door like so many big-game trophies.

But much like his great-grandfather, who created the ambitiously named South Carolina & Pacific Railroad, McColl long perceived California as his manifest destiny. And even now, McColl sees a lot of fertile ground in the old BankAmerica franchise, whose typical customer held only an average 1.6 banking and other financial products—well below the 3.0 average for Nations-Bank. Already, Bank of America is expecting to generate \$8 billion in new loans from a 15-year mortgage product—used largely by customers for debt consolidation—that McColl & Co. introduced in California after the merger.

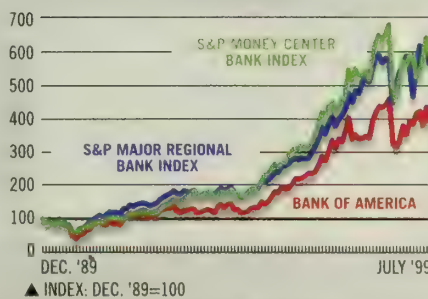
But even for an old pro like McColl,

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NHATTAN	41	59
AN	18	82
ON	55	45
NEW YORK	40	60

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BAD SLIPS WHILE BUILDING THE BIGGEST BANK

JUNE 30, 1997 Unable to woo Wall Street investment bankers to his NationsBank Corp., McColl pays \$1.3 billion to acquire Montgomery Securities, a respected San Francisco firm with a specialty in high-tech and other growth industries.

APRIL 13, 1998 After several years of off-and-on talks, McColl agrees to a "merger of equals" with David A. Coulter, president of the San Francisco-based BankAmerica. The deal is unveiled at a festive press conference at New York's Waldorf Astoria Hotel. Shareholders for both banks approve the deal in late September.



SEPTEMBER 21, 1998 Montgomery CEO Thom Weisel resigns after a power struggle with McColl's headquarters staff. Four months later, he starts his own firm. Over the next year, roughly half of Montgomery's partners leave as well.

digesting the old BankAmerica is proving a daunting task. Given the breadth of the new Bank of America, even McColl has told subordinates wistfully that he can no longer "manage by walking around," as he did for years. (Jokes one Charlotte executive: "If you ever held a staff meeting with the doors shut, you could always count on Hugh coming through the door to see what was going on.") While McColl's SWAT team has already merged the old BankAmerica branches in Texas and the Southwest into the old Nations-Bank computers, they won't finish absorbing all of the West Coast branches until early 2001. James H. Hance Jr., the bank's chief financial officer, admits that "one of the greatest frustrations we have in our company today is that we are looking at a 2½-year time frame for the transition."



OCTOBER 14, 1998: Two weeks into the merger, BofA stuns Wall Street with a \$372 million write-down of a troubled hedge-fund loan—an unusual deal that President David A. Coulter had personally arranged. Speculation mounts on Wall Street that Coulter or other BofA executives will take the fall.

OCTOBER 20, 1998: Bank of America director and long-time McColl confidante W.W. "Hootie" Johnson flies to San Francisco and, over breakfast, secures Coulter's resignation. Other top San Francisco executives also depart in coming months.



APRIL, 1999: The merger starts to take hold: Bank of America begins one of the largest signage changes in history. After decades of dealmaking, McColl is now focusing on delivering strong earnings.

SOURCE: BW

There's no doubt that the payoff is coming a little slower than expected. Second-quarter profits fell 17%, to \$1.92 billion, largely on merger-related expenses. And thanks to the heavy costs associated with consolidating the two banks—including a series of moves by McColl to scale back his new bank's international exposure—analysts have already lowered their earnings estimates 16% below what Bank of America officials first promised last April. As a result, most investors are taking a wait-and-see approach. Bank of America's stock is trading at a mere 13 times this year's projected earnings, vs. 16.4 for Citigroup and 18.1 for Wells Fargo.

What's more, the 21% year-over-year rise in nonperforming assets—coming in a booming economy—is leading some analysts to question whether the bank might be stretching on the credit front

as well to meet Wall Street's expectations. "They are having to struggle to meet their numbers," surmises Ed Jones analyst Michael Ancell. "As the economy turns down, we're going to see more credit-quality problems. Analysts are tracking the bank's exposure to such troubled borrowers as footwear retailer Just For Feet Inc. and Me steelmaker AHMSA, as well as its significant financial exposure to nursing-home operators, many of whom are struggling to adapt to Medicare cutbacks. It maintains that the bank hasn't compromised its credit policies, and notes performing assets fell slightly in second quarter.

Still, McColl believes there's a opportunity for banks like his to prove on the industry's spotty record for service. And Bank of America above reproach: Its acquisition of

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McColl is trying to build fee-related businesses by cross-marketing everything from mutual funds to mortgage

nett Banks Inc. in Florida was initially plagued by software snafus that fouled up customer statements and employee cuts that created interminable waits at branches—all of which triggered withdrawals that cost McColl & Co. at least two precious points of market share in Florida. McColl's new mission: To "redefine banking," he says, "and make this bank work for customers and clients as no other bank before."

Already, McColl has commissioned a flurry of initiatives to do everything from speeding up and simplifying the often tedious task of getting a loan to empowering branch employees to resolve most customer disputes on the spot. To prevent its customers from drifting to Fidelity Investments or Vanguard Group, Bank of America is offering more mutual funds managed by respected outside managers like Putnam, Invesco, and Thomas Marsico, the former Janus Funds whiz who now runs his own shop.

FAST TURNAROUND. What's more, by consolidating the bank's vast account databases onto a single system, McColl hopes by next year not just to start providing on-the-spot approval for mortgages and other loans to many current customers, but to actually cut the check within hours—a feat that few other large banks can pull off on any scale. And Bank of America is working feverishly to provide business customers with real-time notification of account activity—such as the receipt of a critical check—at first by fax, but soon after by E-mail, cell phone, or PalmPilot.

McColl's moves to cross-market everything from mutual funds to mortgages is also critical for other reasons—namely to help Bank of America build a more stable stream of fee-related businesses. For all its bulk, McColl's new Bank of America is basically still an oversized regional bank that's too dependent on the volatile lending business. For all its moves to diversify, Bank of America will still derive 57% of its revenues this year from interest-rate-sensitive activities, vs. 41% for Chase Manhattan and 18% for J. P. Mor-

gan & Co. And as long as the yield curve is still relatively flat—the recent rise in rates notwithstanding—Bank of America's margins and its revenue growth will remain under pressure. Collins, the Barings analyst, projects Bank of America's revenues will grow only 4% through 2002, vs. 18% for Morgan.

McColl's most ambitious efforts to boost fee income are coming on the corporate side, where he's aggressively expanding his reach into underwriting and

notes Jim Davis, president of Loaning Corp. "A lot of CFOs and treasurers that might before have gone to us are now going to them." And with its sprawling network of 4,500 branches in 21 states, the creation of the first coast-to-coast bank has been a boon for companies with far-flung operations, particularly retailers like McDonald's, who can now rely on a single bank to handle cash deposits for half the cost. "Having a nationwide network gathering cash and putting it in a

spot should increase our efficiency," notes McDonald's treasurer Carleton D. Pearl.

CULTURE CLASH. At first, the Montgomery-Collins merger—a respected bond investment bank also based in San Francisco—was supposed to be at the center of this integrated strategy. But in a matter of months after it was announced in 1997, Montgomery's managers started clashing with Chase over everything from pay raises to the firm's price-earnings ratio. Tensions came to a head last September—on the eve of the merger between Citicorp and BankAmerica—when Edward Brown III, a key McColl tenant, moved to consolidate high-yield and private equity efforts of these entities based in Charlotte. But when Montgomery founder and CEO Jim Weisel phoned McColl to



THOM WEISEL: *The Montgomery Securities founder quit*

merger-advisory services—all supported by the largest trading floor outside of New York. And rather than having a bevy of its bankers and investment bankers all separately knocking on a customer's door, Bank of America is moving to offer these services in a fully integrated fashion. "No one else has done that. Not Citigroup, no one," boasts Hance. Nor, adds Hance, can they. "Chase doesn't have equity powers. Morgan Stanley and Goldman don't have the balance sheets or capital structure to be a lender."

Already, the new Bank of America is becoming a force to be reckoned with in the lucrative loan-syndication and leveraged-loan markets, where it has established a virtual lock on middle-market deals. "They've gained a lot of credibility in a short period of time,"

plain that he was being relegated to a bit player, McColl responded: "They thought we bought you." Weisel then launched his own firm—taking on more than a dozen partners, and key clients like Yahoo!, with him.

Clearly, the turmoil at Montgomery has taken its toll on McColl's investment banking ambitions: With more than half of Montgomery's 67 partners now gone, headhunters say that BankAmerica's new investment banking unit, led by Carter McClelland—a Wall Street veteran who most recently built Deutsche Bank's Wall Street arm—has been forced to dangle packages of \$6 million a year to woo bankers from rival firms. Worse, many of Montgomery's clients remained fiercely loyal to Weisel. "I'm not even sure who they go over there sometimes, whereas

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BALANCED FUND	114.05%	15.53%	22.51%	★★★★★ MORNINGSTAR Rated among 3,043 domestic equity funds
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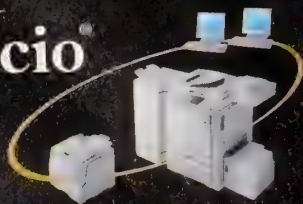


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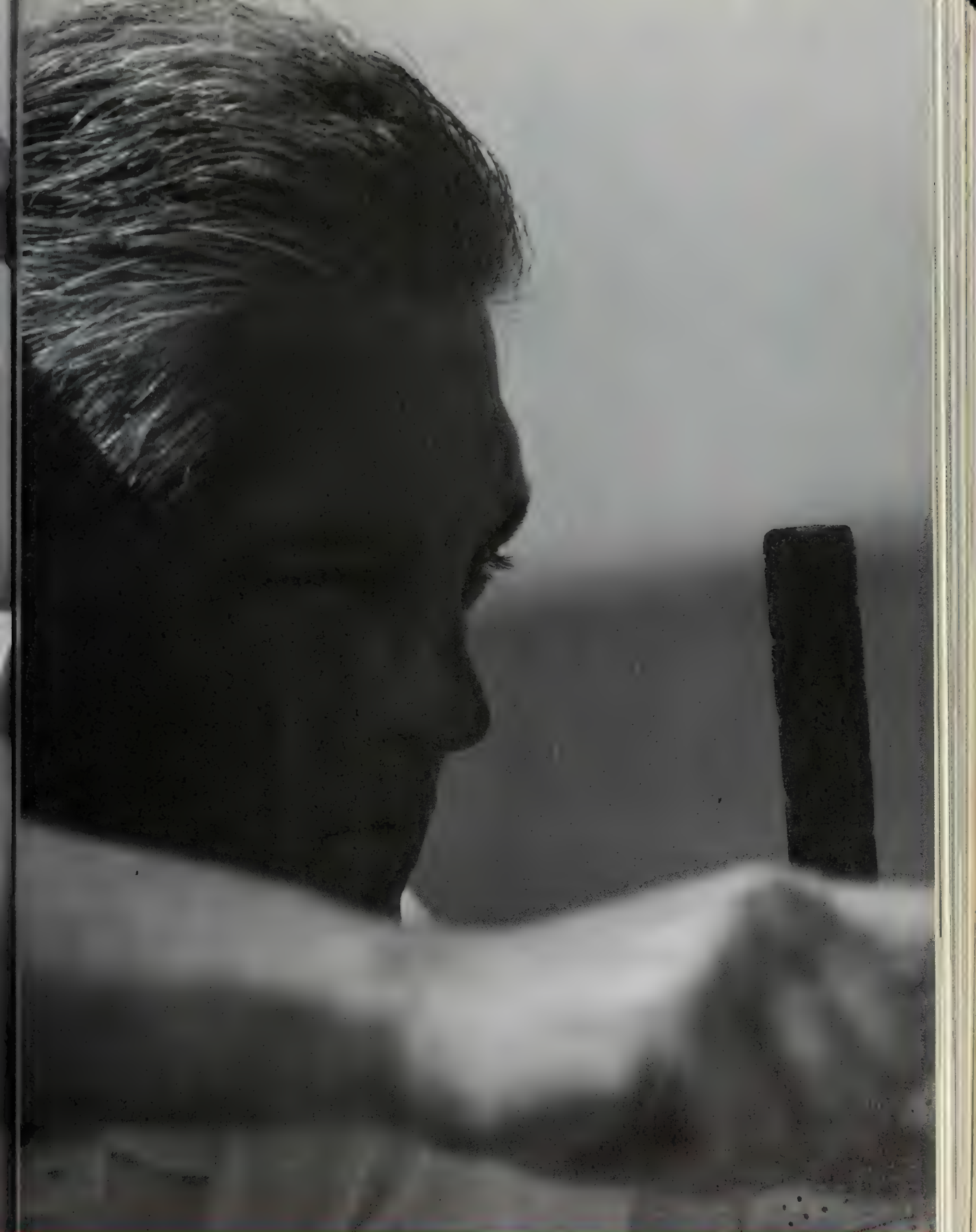
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Weisel knows us well," says Mirage Resorts Chief Financial Officer Daniel R. Lee. "Why should I call a stranger and ask his opinion just because his business card says Bank of America?"

As a result, Sanford Robertson—whose own investment bank, Robertson Stephens & Co., was sold to the old BankAmerica in 1997 and then resold to BankBoston Corp. last year—now estimates that Montgomery is worth less than half the \$1.3 billion McColl paid just two years ago. Bank execs dispute Robertson's estimate. "How would Sandy Robertson know? He's got his own problems with BankBoston," counters Hance, who points to the 117% second-quarter rebound in corporate banking fees as evidence that

the new hires are bringing in new business. Bank executives argue that if such clashes were inevitable, it was best they played out quickly. "As Hugh says, 'I'd rather run through fire than walk through it anytime,'" shrugs President Kenneth D. Lewis, who is now viewed as McColl's heir apparent. "I am very pleased at where we are. Montgomery is distant in my memory."

ONE VOICE. And while rivals like Citigroup have their lending officers and investment bankers making joint customer calls, Brown believes that BofA's approach—appointing a single lending officer to sell various capabilities—will enable the bank to speak with one voice. "I think you're going to get better mu-

sic out of an orchestra that has a conductor," he says. Murray agrees: "One has done this properly yet."

"But if we can get this right, it will be a huge competitive advantage."

McColl still faces hurdles to the pinnacle of banking. But he's not quitting. After three grueling years scaling the Swiss Alps, McColl and fellow climbers awoke the final morning to a panoramic view below that seemed to justify all of the risks they had taken. "Postcards could never do it justice," recalls Snider. Now, in the twilight of his storied career, the sooner McColl pulls together his vast empire, the sooner he can enjoy the view.

By Dean F. ...
Charlotte

MUTUAL FUNDS

THE BIGGEST FUND YOU NEVER HEARD OF

Pension heavyweight TIAA-CREF is retailing mutual funds

For years, the Vanguard Group has preached the gospel of low costs to mutual-fund investors. As its simple message has caught on, Vanguard has become the nation's second-largest and fastest-growing fund firm. Now, a new rival, known by the unwieldy acronym TIAA-CREF, is challenging this colossus with a low-cost message refined over eight decades of managing pension funds for colleges, universities, and nonprofits. "No one has ever competed successfully with Vanguard," says Burton J. Greenwald, a Philadelphia mutual-fund consultant. "Now, for the first time, there is a competitor with enormous credibility."

MAGELLAN WHO? Although it is virtually unknown, TIAA-CREF is no upstart. With \$268 billion under management, TIAA-CREF—which stands for Teachers Insurance and Annuity Association-College Retirement Equities Fund—is the world's largest pension system. If it were a fund company, it would rank as

the nation's fourth-largest. And its flagship product—a \$123 billion variable annuity—dwarfs Fidelity's Magellan, the nation's largest mutual fund.

Still, while TIAA-CREF is a giant, it is a nobody to the public. That's because in 1920, Congress granted the pension heavyweight a tax exemption that was

contingent on it focusing exclusively on retirement products for the nonretiree and education fields. When rival Vanguard persuaded Congress to revoke the exemption in 1997, TIAA-CREF was free to enter new businesses. "We're the world's largest unknown fund," says Chief Investment Officer Martin L. Leibowitz. **AMBITIOUS ARRAY.** But now that the exemption's golden handcuffs are gone, the sleeping giant is starting to stir. Its presence is becoming known. As if to make up for its late start, the nonprofit trust company, a business managing assets for state-sponsored college savings plans, and a low-cost, after-tax annuity it plans to take nationwide this fall. The 2000 fund will bring



new mutual funds and life insurance designed to cover estate taxes. All of this is the low-cost approach Vanguard made famous: "We're the first institution to compete with Vanguard on our own grounds," says TIAA-CREF's chairman John H. Biggs.

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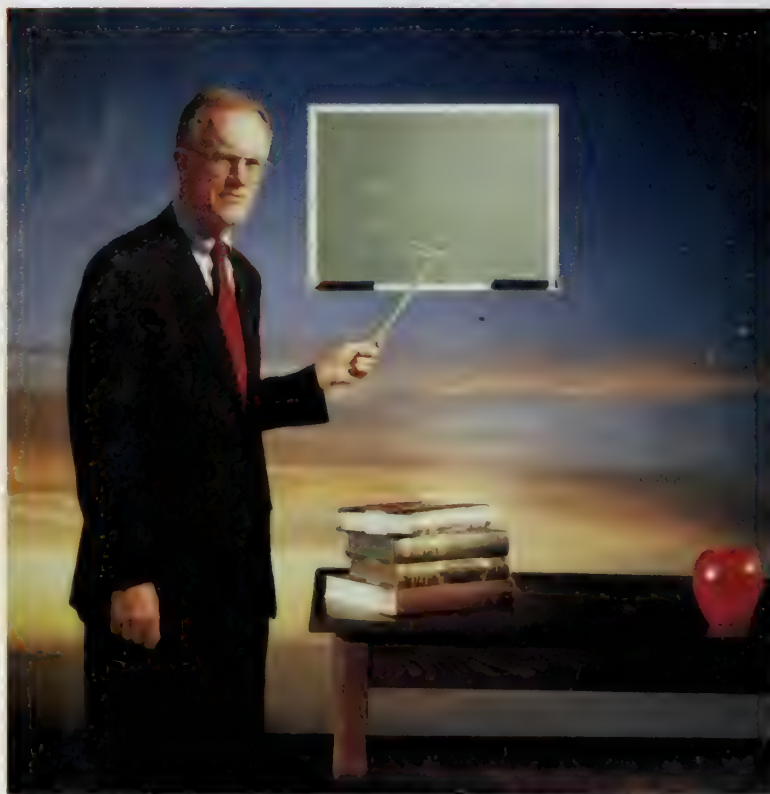
guard isn't surprising. Both are nonprofits that charge no more than it takes to cover their expenses including rent and salaries. And each relies mainly on an investment approach that replaces high-paid stockpickers with formulas that mechanically replicate stock market indexes, such as the Russell 3000 and Standard & Poor's 500-stock index.

"VULTURE." Principals in both outfits admire the other company, as well. Vanguard founder John C. Bogle has praised TIAA-CREF as a "low-cost vulture." And before TIAA-CREF began venturing on Vanguard's turf, Biggs frequently steered the company's pensioners to Vanguard. "We share a deep sense of cheapness on the part of our customers," says Leibowitz of his rival.

As a result, consumers pay charges that are among the lowest around. While TIAA-CREF pockets from 0.29% to 0.49% for every \$100 invested in its mutual funds, Vanguard charges 0.28%, on average. That's about one percentage point less than the industry's norm of 1.37%.

Although 1% may seem insignificant, those savings give investors a head start that compounds over time, resulting in a powerful performance edge. Like Vanguard, TIAA-CREF boasts a strong record. Its flagship variable annuity—19% of which is invested overseas—had an average annual return of 16.16% over the past decade, vs. 13.85% for the average stock fund. As is typical of TIAA-CREF, the fund uses an "enhanced indexed" approach. About 75% of its assets are indexed, while the remainder are managed by stockpickers.

Like the pace of its new-product introductions, TIAA-CREF's goals are anything but cautious. Biggs figures that within a decade, three of the new businesses could be attracting as much new money as the pension system, which at \$265 billion currently accounts for 99% of the firm's



BIGGS: Aiming for 2% of the mutual-fund market within 10 years

assets. Last year, pension inflows totalled \$7.9 billion.

Clearly, TIAA-CREF has a long way to go. The aftertax annuity, which Biggs expects to capture 5% to 10% of the market in five years, is barely off the ground. And at \$1.5 billion, the mutual funds are far from their \$5 billion breakeven point; and they're light years from the \$10 billion in annual inflows, or 2% market share, that Biggs thinks is feasible within a decade. Still, Biggs is undaunted. "We should become a major player," he says.

able to get support from fee-only planners," says Bob Wacker, a planner in San Luis Obispo, Calif.

To broaden its distribution, TIAA has made its mutual funds available through Schwab's huge fund supermarket. And to increase its visibility, the firm has become the investment adviser for seven new state-sponsored programs that encourage college savings, including New York's and California's.

But don't look for the unvarnished acronym to become a household name anytime soon. That's because, in order to contain costs, TIAA won't do much advertising. Instead, it is imitating Vanguard, whose strong record generates enough free press and word-of-mouth to compensate for a tight budget.

Is Vanguard nervous yet. Sure, TIAA-CREF's products are making the headlines, but in a bull market crowded with low-cost products, it took Vanguard two decades before it became a sensation. Regardless, the bottom line for investors is that no matter how fast TIAA-CREF expands, its costs won't follow suit.

By Anne Terrell
in New York

The Long Road Ahead

	TIAA-CREF	VANGUARD
FUND ASSETS	\$1.5 billion	\$500 billion
NUMBER OF FUNDS	6	89
FUND CUSTOMERS	95,000	14 million
COSTS	0.29% to 0.49%	0.28%, on average
ADVERTISING BUDGET	About \$10 million to \$15 million*	\$10 million
INVESTING STYLE	Funds combine indexing and active management	Funds are either purely indexed or purely managed

* In 2000

DATA: BUSINESS WEEK

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By Patricia Kranz and Margaret Coker

THE TIDAL WAVE OF CASH GUSHING OUT OF RUSSIA

The Russian money-laundering scandal is grabbing headlines around the world. That's no surprise, since it has all the elements of a juicy story: money, drugs, and sex. Investigators in Britain and the U.S. believe the Russian mafia has used the Bank of New York to smuggle as much as \$10 billion out of Russia. Some of the laundered money comes from proceeds of activities such as contract murders, narcotics trafficking, and possibly prostitution, investigators say.

It's horrible publicity for the Bank of New York. But \$10 billion is only a tiny drop in the tidal wave of capital that has gushed out of Russia in recent years. Fitch IBCA, a London-based credit-ratings agency, estimates that \$136 billion was taken out of Russia from 1993 through 1998. Moscow-based Troika Dialog investment bank calculates that the total could be as high as \$500 billion in those six years. So even a thorough and successful investigation of the Bank of New York—or any other bank that has actively courted Russian business—is unlikely to make much difference. The powerful money flows will continue until there are drastic changes in Russia.

DEVILISH DEAL. There's little hope of that anytime soon. Russian politicians are gearing up for parliamentary elections this December and presidential elections next July. They don't want to rock the boat by making any major changes. That poses a big challenge for policymakers in the West. They've known about Russian capital flight for years. They even abetted it by looking the other way when billions of dollars of aid money disappeared into the pockets of corrupt bureaucrats and businessmen. But they thought they were doing the right thing by supporting Yeltsin as he fought off Communist challenges. And they wanted to prevent chaos in a nuclear power. Now, the money-laundering scandal is shining a harsh spotlight on their Faustian bargain.

The fact is that Russian-style capitalism and capital flight go hand in hand. Members of the resource-rich country's business and political elite are stripping Russia of its assets, from oil to aluminum to furs. Over the years, they've perfected a myriad of ways to get cash out of the country, from carrying it out in suitcases to setting up elaborate networks of shell companies and bank

it's also often a way to limit payments to the Russian tax man. Why experts believe that the majority of the capital that flows out of Russia comes from companies or individuals engaged in normal economic activity, from selling oil to hamburger. But the machinations they go through to get the money out are certainly questionable—and bend, not break Russian or overseas law.



Only reforms that may take decades can halt the flow of capital out of the country

accounts. Even ordinary Russians find ways to set up bank accounts when they vacation abroad.

Why does everyone from government officials to street cleaners want to get their money out? The reasons are political and financial and entirely logical. Russians have a legitimate basis for not trusting their politicians. They lost their savings in 1992 when Boris N. Yeltsin's economic reforms sparked soaring inflation. Last year, the central bank promised to reimburse depositors for money they lost when banks collapsed in August. Most are still waiting.

Businesspeople turn to offshore banking as a way to contain the risk in an economy where the banks are unsound and corruption is fierce. But

Examples abound. For years, foreign investors have accused managers of Russia's oil and metals companies of cheating shareholders by selling commodities on world markets and parking the proceeds offshore. In another scheme, Russian managers set up an offshore shell company, using it to bill Russian customers for goods to be imported. Customers prepay with a wire transfer to the offshore company. But the goods are never shipped, and the money is left outside Russia.

What could stop the cascade of capital? Probably only decades of thorough economic, political, and legal reforms. The Clinton Administration and the International Monetary Fund should admit this. It's time to tell Russians: "No reforms, no money." Or at least the Administration should be perfectly up front about policy goals in Russia. If the West is willing to pour money into Russia because it wants to preserve stability in a country full of nuclear weapons, just say so. It's time to stop pretending.

Kranz and Coker have reported on Russia since 1990.



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BASKETBALL

IS ISIAH THOMAS CRAZY LIKE A FOX?

He sees opportunity in a cash-strapped basketball league

There's an old saying about how to make a small fortune," quips Charley Rosen. "Start with a large fortune and buy a CBA team."

Rosen ought to know. He coached in the low-budget Continental Basketball Assn. from 1986-92 and has been watching it struggle ever since. One of the biggest surprises about the nine-team league, whose franchises play in basketball outbacks like Boise, Idaho, and Yakima, Wash., is that it's still around to be scoffed at. "TV deals don't exist. Merchandising is really minor. And they can't draw fans," says Rosen.

That's what made the news of Isiah Thomas's plans to buy the CBA so curious. Thomas, a former National Basketball Assn. star with the Detroit Pistons and until two years ago a 9% owner of the Toronto Raptors, has agreed to acquire the entire league for \$10 million. In an era of escalating sports franchise values, that's chump change. But it remains unclear whether Thomas got a bargain or a tax loss.

TWO HURDLES. Thomas has a two-part plan for righting the struggling CBA: First, have the league control everything. Second, use his personal prestige as one of basketball's all-time greats to forge a closer relationship with the National Basketball Assn. "The ultimate dream," as Thomas calls it, is to position the CBA as an official minor league for the NBA, using as a model farm systems for Major League Baseball and the National Hockey League. If Thomas is able to put his plans into action, the league could be worth as much as double the purchase price, says John Mansell, a senior analyst at Kagan Media Appraisals Inc. "You've got to believe there's a lot of potential here, especially if they're able to move



THOMAS (TOP) AND A CBA EXHIBITION GAME: Can he turn the league into an official farm system for the NBA?

into larger markets," says Mansell.

For that to happen, Thomas needs the cooperation of two headstrong partners: the NBA and the National Basketball Players Assn. NBA Commissioner David Stern hasn't embraced the minor-league plan publicly, but he clearly approves of the CBA's new leadership. "We've told Isiah that we've supported the CBA in the past and as soon as his situation is clarified, we'll sit down and look for ways to continue to support it," says Stern. "Anything else at this point is premature." The players' union, which has opposed tighter alliances between the leagues in the past,



figures to be an obstacle. Says Thomas, a former president of the union, "Every successful deal is done because of timing, timing. The timing is right for this kind of conversation."

Bonds between the CBA and the NBA already exist. Since the late 1970s, the CBA has operated as the official developmental league of the NBA. The NBA has used it to train refs, and NBA teams have had to sign replacement players off its rosters. (Since 1978, the NBA has signed players from the CBA 514 times.) Last year, the cash-strapped CBA received nearly \$2.5 million from the NBA.

Thomas envisions a minor league growing to include an affiliate for each NBA team. The Los Angeles Lakers, for example, would have a farm team learning its playbooks. "When a player is called up, he'd fit right into your system," says Thomas.

The players' union sees a darker side to such a deal. Union leaders fear NBA teams would use the threat of punishment to minor-league affiliates as a way to more tightly control players. Thomas says that's how things worked in baseball and hockey. The union also has a problem with any plan that might further restrict players from moving between teams.

Still, a newly constituted CBA must address a union concern: what to do about teenagers leaving school for basketball. Union and NBA officials are



There's always room at the top.

—Daniel Webster

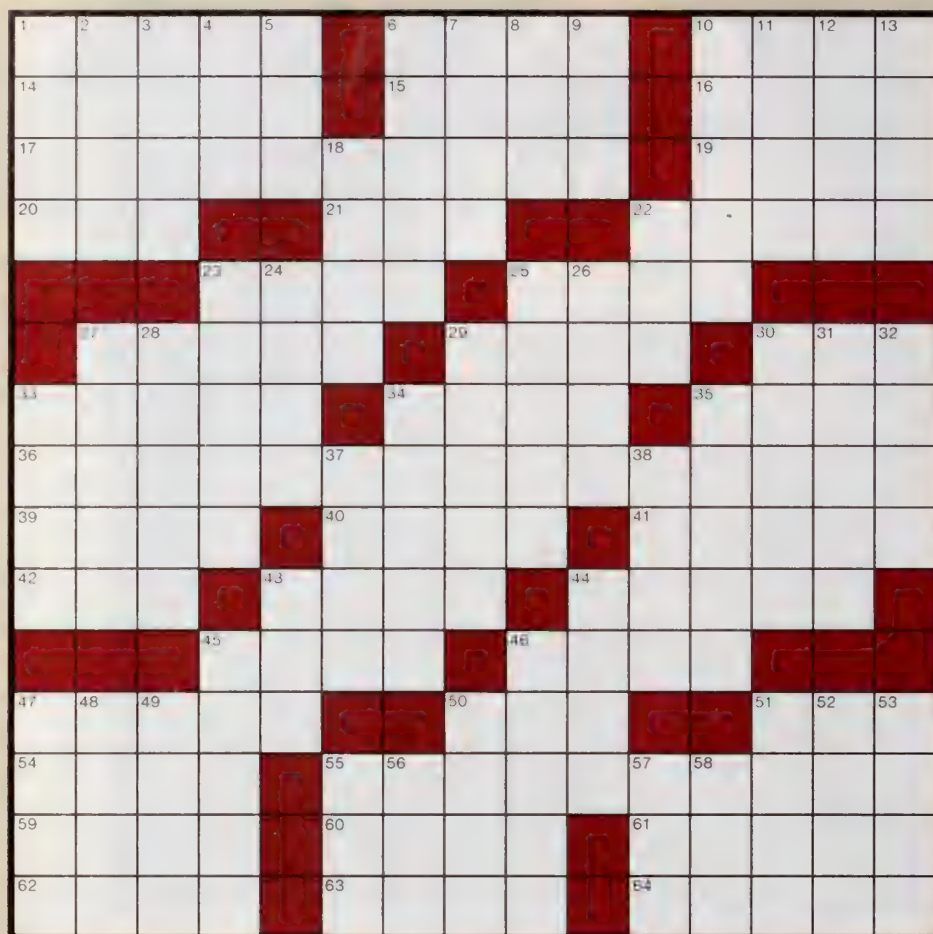
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cussing an age minimum of 20 for players. That could set up the CBA training ground for 18- and 19-year-olds.

Certainly, the CBA is less daunting than the NBA. Teams play in cozy arenas and have nicknames like the Boston Sun Kings, and Skyforce. Crowds are small—averaging 3,809 last year—rabid. And there are few better arenas for long-range jump shooting and bending dunks. "I see this as an unpolished jewel," Thomas says with a man's bravado. "A lot of small markets want quality entertainment but can't afford the high-priced tickets of professional sports." Indeed, the CBA is the budget-conscious: Courtside seats for the Idaho Stampede sell for \$15. **WANDERERS.** Though it's been around for 53 years, the CBA has had minimal media exposure—its last major TV game was in 1994. And teams tend to wander. More than 60 clubs have folded in the past 20 years, and relocations are as common. One team once folded in the regular season in Florida, and qualifying for the playoffs, moved to South Dakota. Players earn an average of \$30,000, but owners have been known to slip stars an extra \$500 under the table, in violation of the league's salary cap. "It's the Wild West of pro basketball," says former coach Rosen.

As the league's sole owner, Thomas plans to pare expenses and woo rate marketers. That might seem a tall order for a man who concentrated on pro basketball for 13 seasons. But retiring in 1994, Thomas has been an NBC basketball commentator, and, more important, a successful businessman. Years ago, he sold his stake in the Detroit Pistons for \$12 million. Now, Thomas grew up in poverty in inner-city Chicago. He has a number of small-business investments, including a company that supplies disk jockeys for corporate parties and an e-commerce startup, isiah.com. Thomas tends to think very strategically. Rick Inatome, chairman of Inacom, a computer-services company based in Omaha and a mentor to Thomas, says it's the best business career.

Thomas got interested in the CBA earlier this year when league Commissioner Gary Hunter asked him whether he considered buying an expansion franchise in Detroit. Instead, Thomas set his sights on buying out the league's odd investors. Ever since, he has been explaining to friends and reporters why he would want a league with a colorful past and an uncertain future. "That's the opportunity," Thomas says. "That's the opportunity."

By Mark H.

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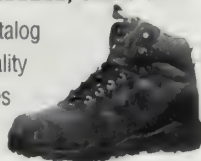


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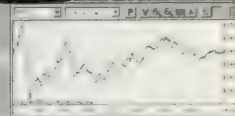


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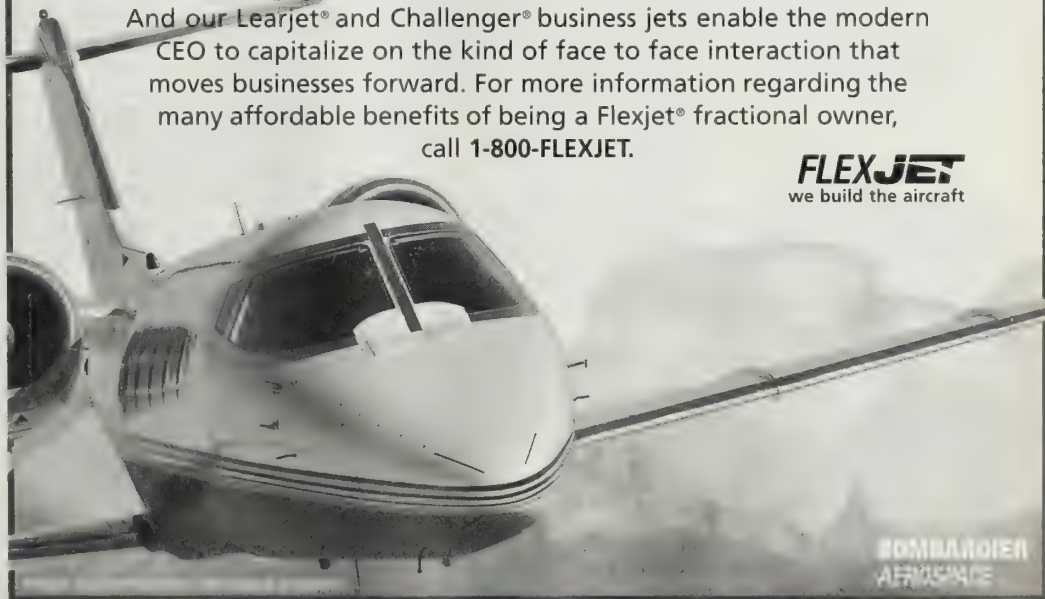
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COMMENTARY

By Mark Hyman

THE UMPS WERE AN EASY OUT. THE PLAYERS WON'T BE

the rap on Bud Selig before he became commissioner of Major League Baseball was that he didn't have the backbone to preside over the squabbling Lords of Baseball and the spoiled millionaires in the dugout. They called him "Bud lite" for being soft.

Now, Selig's role in squashing the revolt of MLB umpires is being questioned by a lot of people in baseball. Reason to reassess the position. From the owners' point of view, Selig pushed all the right buttons. In July, he got 50 umpires to resign, effective Sept. 2. They were attempting to pressure the owners into early contract negotiations just before the season—but Bud refused to be bullied. Within two weeks, all were crawling back to their jobs and Selig had won a mockery of Major League Umpires Assn. chief

Phillips and his ill-fated strategy. For some umpires, the about-face came too late, though. Baseball released 22 of them with new hires. Among the unlikely, their careers as league umpires were scheduled to end on the date they selected.

LINEUP. How sweet it must be for the owners, who have a history of being beaten at the bargaining table. In fact, Phillips has bested the ball several times—most notably by locking the ouster of umpires who gave poor evaluations. And the players clobbered owners in every round of bargaining since the dawn of free agency.

But a lot has changed in baseball's executive suites since the disastrous 1994-95 lockout that wiped out a thrilling season and, for the first time, ended a World Series. Selig has set himself up as permanent commissioner and has assembled a roster that includes Chief Operating Officer Paul DePodesta and Executive Vice-President of Baseball Operations Sandy Alder. Both are widely respected front-office veterans. Along with Rob Manfred, MLB's la-



TOSSED OUT: Baseball saw a chance to clean house

bor-relations lawyer, this is the lineup that has made Phillips look like a rookie. It's the same team that will negotiate with the Major League Baseball Players Assn. The current deal between owners and players runs through the 2000 season, with a players' option for continuing it through the 2001 season.

Of course, the players, with immeasurably more leverage than the umpires, won't be so easily outmaneuvered. And odds are they won't commit as unpardonable an error as Phillips did with his resignation strategy. The disarray within the union over resigning made it easy for owners to turn a deaf ear to perhaps legitimate demands, including higher pay and harsher treatment for players who mistreat umpires. "This is a negotiation I think my 10-year-old son and I could have handled," says Rodney D. Fort, an economics professor at Washington State University and

author of *Hardball: The Abuse of Power in Pro Team Sports*.

It's early, but some things seem to be going right in talks between owners and player reps. After meetings between Beeston and union chief Donald M. Fehr, the two all but admitted to liking each other. On several issues of late, including the first visit by a major-league team to Cuba in 40 years, MLB and the players' union worked together without a hitch.

Behind such small gestures, though, old differences remain. Owners continue to fret that the widening gap between free-spending, big-market teams and small-market, cash-strapped clubs will destroy any competitive balance and alienate fans. Owners would love to impose a strict salary cap like the one the National Basketball Assn. negotiated this year. Ballplayers continue to maintain that the owners' miseries are mostly self-inflicted. Aggressive revenue sharing would close the money gap overnight, they say, but owners of rich teams have resisted such socialistic solutions for years.

For now, there's little chance of

players accepting a salary cap. Led by the tenacious Fehr, they've fought off cap proposals of every stripe. In the last negotiation, they did accept a milder salary-restraint system—a payroll tax assessed against the highest-spending clubs—but even that expires before the present agreement ends.

So while getting the umpires to knuckle under is a start for Selig &

Co., it's just spring training. Let's see how Team Bud does when the players' union is at the plate. That's when the real season begins.

Hyman is Contributing Editor for Sports Business.



PHILLIPS: Rumbles in the ranks from day one

BusinessWeek Lifestyle



Northwest of Napa, A Road Less Traveled

BY ANDY REINHARDT

With its lush carpet of vineyards bracketed by soaring mountain ranges, Northern California's Napa Valley richly deserves its reputation for stunning beauty. But Napa isn't exactly undiscovered: On weekend days, traffic clogs roads and tour buses fill winery parking lots. Just 30 miles away, though, lies a grape-growing valley with fewer tourists and wines every bit as fine.

Spreading northwest from the town of Healdsburg, the Dry Creek Valley offers visitors lush, if less dramatic, scenery and a growing selection of high-caliber wineries. Best of all, its small scale and slower pace make it ideal for bicycle touring.

For a perfect day trip from San Francisco, hop in the car and head up U.S. Highway 1. About an hour and 15 minutes north of the city is Healdsburg, a booming agricultural town of 10,000. It has been upscale in the past century by wine wealth and creeping yuppiness, still largely free of cloying boutiques. Its town center is a lovely park rimmed by shops and restaurants. If you need to rent bike pump up tires, you'll find a bike shop. Spoke Folk just off the plaza on Central Street. Bikes of all sizes cost \$25 a day, including helmet and day pack. On weekends, reservation highly recommended (707 433-7171).

Before heading out, explore the plaza and throw together a picnic. Make the Down

Bakery & Creamery on Central Street your first stop and stoke up on whole-wheat currant orange scones. The best coffee around is served one block north at the Flying Goat Coffee Roastery Cafe. For a good map, go to Toyon Books on the square's south side and pick up the *Guide to Northern California Wineries* (\$3.95). Then head over to Oakville Grocery, a new outpost of the Napa Valley delicatessen, for cheeses, meats, breads, and salads. Grab some bottled water, too. It can get quite hot riding through vineyards.

Now that you're provisioned, cycle north on Healdsburg Avenue. Five minutes from the square, you'll come to Dry Creek Road. Turn left and ride under the Highway 101 overpass. From here on, you're

WINE AND WHEELS

Dry Creek Valley's smaller scale makes it ideal for biking



ountryside. Of the valley's two main Dry Creek Road is the more heavily trafficked, but it also has wide shoulders and a smooth surface. A leisurely 45-minute ride will take you to Lambert Bridge. Turn left, and two minutes later you'll spot Dry Creek Winery. Set back from the road behind a lush copse, ivy-covered walls and a hand-painted sign. The winery is best for its Pinot blanc—another name for Chardonnay—but also produces Pinot noir and Zinfandel. The regular Pinot noir has a fresh, flinty taste and costs \$15 a bottle. Dry Creek also sells a Pinot blanc reserve that has undergone paraffin fermentation, the process that gives Chardonnay its distinctive buttery quality. A winery worker called it "a wine with

an identity crisis," but its blend of grassy and buttery-scented tones is enticing.

Between tastings, nibble on chunks of bread and browse the low-key gift shop. Dry Creek limits visitors to four free tastings, but the rule isn't strictly enforced. It also offers an unusual self-guided walking tour of its vineyards. If you visit in September, you'll see grapes just before the harvest. Unfortunately, you can't tour the winemaking operation. If you buy wine there or anywhere else en route, you can pick it up later in your car. Most wineries offer a 15% discount on full cases and can ship to 29 states.

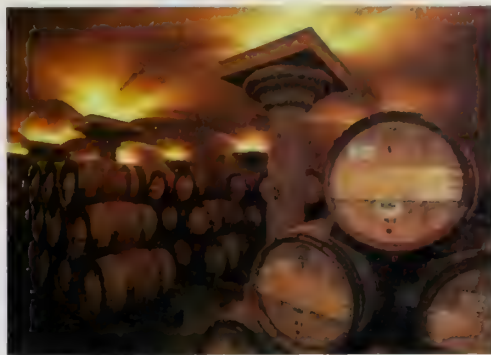
BLIND CURVES. After a few minutes to clear your head, return to Lambert Bridge Road. A left turn will put you back on route, and after a three-minute ride, you'll come to West Dry Creek Road, the narrower and less-traveled thoroughfare. The meandering road is far more pleasant for cycling, but its blind curves demand alertness.

Turn right on West Dry Creek for two destinations in quick succession. The first is A. Rafanelli Winery, a small family-run outfit that makes cabernet sauvignon and Zinfandel. Advance reservations are required for visits (707 433-1385), but it's worth a trip. A short driveway lined with roses and redwoods curves up to the tiny tasting room. There, you can sample Rafanelli's full-bore Zinfandel (\$21) and get a winery tour from the third-generation proprietor or one of his daughters. Next comes Quivira Vineyards, a new winery in a striking modern building. Quivira's Fig Tree Vineyard sauvignon blanc (\$14) undergoes malolactic fermentation, giving it a creamy, vanilla quality. The fruity, jammy Zinfandel (\$20) is, in the words of a tasting-room clerk, a "drink-it-now zin" that you can enjoy without an accompanying slab of beef.

Continue north on West Dry Creek Road and start dreaming about a picnic lunch at Preston Vineyards—the sweetest spot in the valley. The five-mile ride through the vines should take about 45 minutes. An oasis surrounded by grapes, Preston features a simple tasting room, picnic tables under an arbor, two bocce courts, and a big vegetable garden. Owner Lou Preston, an affable man with wire-rim glasses and a beard, also has taken up bread-baking, though his production is intermittent. In perfect Northern California style, he keeps the schedule on his Palm Pilot.

Preston makes eight wines, including six varietals and two blends. Three are outstanding deals: a delicious Marsanne (\$11), a rosé blend Vin Gris (\$9), and a fine red blend called Faux (\$11). After sampling the selection, grab a bottle of chilled Vin Gris, borrow some wine glasses from the tasting room, and settle in for a long picnic under the arbor.

On your ride back, consider a brief detour for sheer theater. Cross the valley on Yokum Bridge



OVER A BARREL?

Ferrari-Carano's grandiose villa is a bit of Las Vegas in Dry Creek

DRY CREEK SHOPPING

THE GARDENER

A rural outpost of the Berkeley housewares store, the stylish Gardener sells everything from fine soaps to garden furniture. 516 Dry Creek Rd., Healdsburg. 707 431-1063

JIMTOWN STORE

A general store set amid the vineyards, Jimtown features off-beat foods and gifts, a deli, and quirky antiques. 6706 Highway 128., Healdsburg. 707 433-1212; www.jimtown.com

BOSWORTH & SON

For cowboy hats, garden tools, or saddles, this small-town hardware and tack store merits a visit. The aroma alone is worth the trip. 21060 Geyersville Ave., Geyersville. 707 857-3463; bosworthandson.com

DRY CREEK VALLEY





...AND THOU

At Preston Vineyards, the bread is delectable, too

Road, just south of Preston, and ride a few minutes north on Dry Creek Road. On your left is Ferrari-Carano Vineyards and Winery—a little bit of Las Vegas. Famous for its chardonnay, the grandiose winery, built in the style of an Italian villa, has rows of cypress trees and gorgeous flowers. After your wine at lunch, you can probably skip the \$2.50 tasting, but the gardens are worth a look.

Return to West Dry Creek Road over Yoakim Bridge and turn left for the 90-minute ride back to town. West Dry Creek runs into Westside Road; turn left, pass under Highway 101, and you'll soon be back at the plaza. If you're not totally exhausted, you can pass some time checking out Healdsburg's antique stores

before grabbing an early dinner at a restaurant. The amusingly named Bistr right on the square, is Healdsburg's fine need to book a table (707 433-2380). For down-home dining, you might want to Taqueria El Sombrero, next door to Spo. It's an authentic Mexican joint with ice-cold ceviche.

Before you hit the winery road, a few of caution are in order. Wear a bike helmet and sunscreen. Be careful on West Dry Creek. And above all, ride sober. If the wine is going to your head, take a break and enjoy the scenery. It's so dazzling that one biker through the valley may persuade you to leave early retirement and devote the rest of your years to wine country living.



Eat, Drink, and Keep Pedaling

BY STEPHEN BAKER

It's around noon when Paco brings up the idea of mutiny. We're huffing and puffing up a pine-covered mountain in the wine district of northern Spain, La Rioja. Ahead is Paco's trimmer and younger brother-in-law, Antonio, our leader. If we both vote to head back downhill, Paco tells

me, our ordeal is over.

We're suffering, truth be told, as much from gluttony as the hills. Paco is doubtless feeling the *tapas* we had the night before, not to mention a cholesterol-choked glazed pigs-feet concoction he ate for dinner. All of this was washed down with plenty of red Rioja wine. This is the dilemma: No matter how cool its mountain air and untrammelled its roadways, La Rioja also boasts a local cuisine that's among Spain's finest. Only the most committed bikers can resist its temptations. **NO CROWDS.** Wedged between the cooler, wetter Basque Country and the dry plains of Castile and a three-hour drive from Madrid, La Rioja has a microclimate perfect for *tempranillo* grapes that go into the oak-cured local wine. Far from the tourist hordes on Costa del Sol, it offers a year-round retreat for bikers and hikers and even a small downhill ski mountain, Valdezcaray.

More interested in biking than in touring vineyards, we stayed at a lodge in the hill country,

Hostería Valle del Oja (phone 011-34941 427-416), near the town of Azárrulla. It's simple and clean, about \$80 a night, and it has a fine restaurant with a fireplace. As you turn out of the driveway on your bike, you're on country roads—seriously hilly ones, featuring switchbacked climbs of 3,000 to 6,000 feet. Even with mountain bikes it's a grind. But the ride is exhilarating. In late October, the cherry trees turn a bright red and the ashes turn yellow, making the scenery even more spectacular. Other roads in the Rioja (named for a river, the Rio Oja) are gentler. North of us, between Haro and Logroño, bikers can ride through rolling vineyards. South of us, between Santo Domingo de Calzada, you can follow the pilgrimage route to Santiago de Compostela, 360 miles to the west.

LA RIOJA, SPAIN



No matter which route you choose, make a point of eating at Hotel Restaurante Echaurren in Ezcaray (011-354-047). The restaurant is unpretentious, but its cuisine combines Spanish flavors with the more elaborate preparation of France. The *menu degustación* is an eight-dish odyssey that runs from trout, and green-pepper soup to desserts—all for under \$40. We accompanied us with Marqués de Riscal, a dependable Rioja. It reminds me of good California zinfandel. If you're more biking ahead, perhaps I should have drunk more mineral water. In La Rioja? Fat chance.

VISUAL

In La Rioja, the scenery is splendid, the food is irresistible.



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SANTUARIO DE CHIMAYO

The wooden bell towers of the adobe church built circa 1816

risty, and many worshippers bring bags of it home in hopes of curing the sick and lame or keeping them from striking. Abandoned and hanging on a wall testify to its history.

A store across from the church in Potrero, stocks ground Chiriquito chili, perhaps the most famous in the Southwest. If it's getting late lunchtime by this point, head down the road a mile to Rancho Chimayo, set in an apple orchard in the village of Chimayo. Sit outside the cottonwoods for *carne asada* or pork in red chile sauce.

Chimayo is also known for its distinct style of weaving dating back to precolonial times. Ortega's Weaving Studio, located where the High Road turns east onto New Mexico Route 503, has been in business for eight decades. Big looms located off the road produce colorful rugs and tapestries with bright stripes. A set of placemats is \$54; a coat of arms quilt, \$150. Centinela Traditional Arts, a store so far down the high road that it's more artistic—and costly—than the others, colored by dyes extracted from natural sources like walnut hulls or the bright yellow

masa flowers that dot the road this time of year. Prices range from \$5 for a coaster to \$150 for a finely detailed Saltillo blanket.

Beyond Chimayo, wind upward along the road of the Sangre de Cristo mountains, to where Santeros once carved wooden

statues of saints, now prized by collectors and museums. Today's carvers

use rough-hewn statues of modern saints. After Cordova, you'll hit Truchas, where Robert Redford's *The Man in the Hat* was filmed. Beyond lies Las Trampas, where the adobe church of San Jose de Gracia dates to before the Revolution.

Every few years, loyal Catholics plaster the exterior with a mixture of mud and straw. Inside are plank floors, hand-carved beams, and wooden candelabra, along with *retablos*.

Continue six miles more, to Penasco, and right onto New Mexico Route 75. Seven miles beyond, turn left onto Route 518 toward Taos and enter Carson National Forest, where *chamisa* and sage give way to pine and golden aspen. The high road ends 15 miles at Route 68, the main Santa Fe-Taos highway. The right lies the congested commercial district leading into Taos, a reminder of why the picturesque road through history.

Taking Your Time to Taos

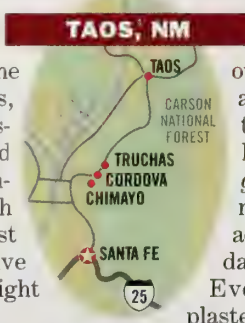
BY SANDRA DALLAS

Most travelers between Santa Fe and Taos opt for the fast route along the Rio Grande River. But in the fall, when yellow cottonwoods shade the road and strings of red chilis, called *ristras*, hang from the eaves of adobe houses, the 70-mile-long high road to Taos makes for an enchanting journey into New Mexico's colonial past.

You'll need at least two hours for the drive, but with stops at galleries, churches, and eateries, the trip can easily occupy a full day as you wind through one Spanish village after another. Begin at Pojoaque, 16 miles north of Santa Fe, on U.S. 84/285. Turn east on New Mexico Route 503, then drive through the high desert for about eight miles. When the road forks, go left.

After two miles, stop in Santuario de Chimayo. Its adobe church, built about 1816, has wooden bell towers topped by wooden crosses. Inside, it's decorated with *retablos*, folk paintings of saints done on boards. Mass is said here daily. On Good Friday, hundreds of the faithful, among

them World War II veterans from Albuquerque, make a pilgrimage to the site. Miracles are attributed to dirt taken from a hole in the floor of a little room behind the sac-



ICONS OF THE WEST

Crafts and galleries abound along the way

Ferry Here, a Tram There...

by CLIFFORD

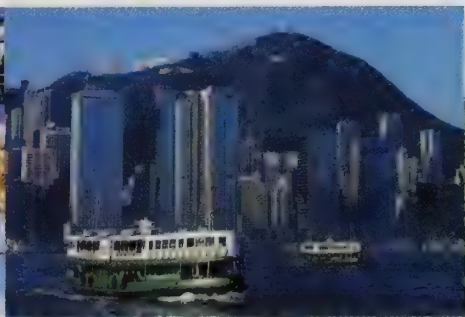
Hong Kong has more Rolls Royces per capita than any other spot on earth, and parking lots are jammed with Mercedes, BMWs, and Jaguars. But one of the best ways to explore this island city is to use its diverse mass-transport network. Trams, ferries, minibuses, and double-deckers all offer an inexpensive way to take this vibrant city's pulse.

With my two children and a visitor from the U.S. in tow, and with a bilingual transit guidebook in my pocket, I set out to travel through Hong Kong using as many kinds of conveyance as possible. Our jumping-off point was the 8:30 a.m. ferry to Mui Wo (Silver Mine Bay) on Lantau. The largest of Hong Kong's 200 islands, Lantau is an hour's boat ride from Central, the business district.

The trip is a spectacular cruise through one of

got the best seats in the house—the front row on the top of a double-decker. A huge window provided a panoramic view as we crossed the Tsing Ma Bridge, a breathtaking span that dwarfs San Francisco's Golden Gate.

A quick ride on a new expressway, much of it tunneled through mountains, whisked us into Yuen Long. Like Tung Chung, Yuen Long was a country village until recently. Today, nearly 400,000 people are crammed into the community, four miles south of the Chinese border. Hong Kong's LRT light-rail system—streetcars similar to San Francisco's Muni trolleys—runs between Yuen Long and the nearby city of Tuen Mun, and we hopped on. We made a quick transfer to the No. 64K bus across the northern New Territories. Brilliant, red-flowering flame trees and palms lined the broad valley before the bus moaned up a corkscrew road and over a mountain pass. It let us out at the Tai Wo station of the Kowloon Canton Railway, which runs along the eastern coast of the New Territories, with fabulous views of ocean and mountains.



the world's busiest harbors. And Lantau, with strict limits on motor vehicles and with few roads around its steep, green, volcanic hills, has a languid air that is in sharp contrast to Central. The No. 13 bus to the town of Tung Chung on the north side of the island zipped along the southern coast before turning inland, straining up a one-lane road through a pass between a pair of 3,000-foot-high peaks. Terraces of old tea plantations climbed the hillsides, while lush, flowering orchids twining on trees hung inches from our faces.

FRONT ROW CENTER. After 40 minutes, we arrived in Tung Chung, a bustling warren of apartment buildings all built in the past three years. There we caught the S1 shuttle bus to the nearby new airport, where we grabbed a snack and the E34 express bus headed for Yuen Long in the northwest corner of the New Territories. We

SHUN THE CAR

The most adventurous way to see Hong Kong is by mass transit—in its myriad forms

At Kowloon, we shifted to the Mass Transit Railway. It's clean, well-lit, comfortable, and crowded, carrying 2.3 million passengers on an average workday. We got off at Admiralty, the first stop on Hong Kong Island, and hopped on a double-decker tram back to Central. These curiosities, nearly a century old, are a delightful, low-speed way to soak up the street life, although ours collided with a wheelbarrow. We disembarked at the angular I.M. Pei-designed Bank of China building and walked to the Peak Tram, a tourist favorite that let us out 1,211 feet above sea level.

After some ice cream to restore my children's flagging spirits, we hopped on the No. 1 minibus for another spectacular ride, down Peak Road back to Central. We ended our trip on Pedder Street in the heart of the business district. Our eight-hour jaunt cost only \$38 for tickets for the four of us—a bargain in a city where gasoline runs \$5 a gallon. True, our travel wasn't as smooth as it would have been in a Rolls. But it sure was more fun. □

CRUISING

anciers will love the Star Ferry, aquat, green-and-white ships between Hong Kong Island and . Or take a high-speed ferry en Mun to Central. For a real op on a small sampan, known rido, from Aberdeen on Hong land to Lamma Island, a carnic-and-hiking paradise.

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The time has come: You need a financial plan, and you want a professional to do it. So you fire up your browser and turn to the Web. With all the investing resources available on the Internet, you'll have no trouble finding detailed referrals to locate that one adviser who can best handle your special needs—right?

Wrong. Enter "financial planner" in your search engine, and you'll find at least a half-dozen Web sites promising to match you up. But none of these offerings provides all the tools you need to find the money manager or planner who's right for you. In choosing an adviser, it seems the World Wide Web can't yet replace your local network of family, friends, and financial providers.

Online financial matchmaking got a big boost when Microsoft recently announced plans to get into the business. Its new site (www.therightadviser.com) promises to simplify the daunting search by linking investors with advisers who are pre-screened by Dalbar, a Boston investment-research firm. Answer 15 questions about your location, finances, and planning needs, and presto!, a list of five local advisers appears.

The problem, critics say, lies in Microsoft's promise to screen its advisers. What screen? Microsoft charges each adviser \$5,000 to be included and requires a clean regulatory record for five years. Some planners say that's not enough to bar devious or unqualified advisers. "There's no minimum threshold for educational competency," says Mike Chasnoff, president of Advanced Capital Strategies in Cincinnati, who declined to enlist. "It was: 'You've been in business five years and you haven't been thrown in

Microsoft says its site at least offer would-be clients a preliminary screening that beats "a typical way of

The Net

finding an adviser, which is opening the Yellow Pages," says Ed Graczyk, the lead project manager for Microsoft's MSN MoneyCentral.

But a sophisticated ad, whether it's on the Web or in the phone book, doesn't guarantee a sophisticated planner. Advisorlink.com (www.advisorlink.com), for example, asks investors a series of questions, but dig into the site and you find there are only six advisers to draw from among mutual-fund managers. FinancialPro.com (www.financialpro.com) offers the most thorough questionnaire, but it couldn't match me with



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(out of 999 funds in the international equity funds category)



Emerging Growth

(out of 3092 funds in the domestic equity funds category)



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ner, apparently because it lists only about a dozen of them nationwide.

Other sites are difficult to use. XcelAmerica.com (xcelamerica.com), which charges planners \$1,200 a year to be listed, came up blank using both Netscape and Internet Explorer browsers. (The company concedes that its page doesn't work with Netscape.) The only way we could get in was via America Online. And then, the roster was meager, with only two names for all of New York State.

GUIDANCE GAPS. To avoid sites that offer mainly paid listings, you could visit one of three financial-planning associations. But their search tools are weak. The National Association of Personal Financial Advisors (www.napfa.org), whose members don't take commissions on sales of financial products, lets you sort planners only by location. The largest group, Institute of Certified Financial Planners (www.icfp.org), offers lots of names but the only info it gives about them besides their addresses is that they have met the standards to become a CFP. At the International Association of Financial Planners (www.planningpaysoff.org), a search for Baltimore turned up more than 1,500

advisers—some as far away as Massachusetts. But the IAFP's profiles do offer lots of planners' experience and compensation. The IAFP will merge on Jan. 1. The groups can't say how their new Web site will work.

Even if you find leads on the Net, you'll still have to do standard due diligence. When you find prospective advisers, first see if you're comfortable with them. "At least 50% of the equation is: 'Are you a good fit?'" says NAPFA Chairman Gary S. Sussman, president of IFC Personal Money Management in New York. The other 50% entails how prospective advisers are compensated, their credentials, and what services they provide.

Check with the Better Business Bureau in your state attorney general or securities regulator. Finally, be sure to ask prospective advisers for Securities & Exchange Commission Form ADV, Parts 1 and 2, which details how a planner is paid and whether he or she has been subject to legal or regulatory action. You'll need to get this form directly from the planner. Like most other info you need to pick an adviser, it's just not available on the Web.

Shelter From Rate Hikes?

Health care and consumer staples tend to stay strong

BY SAM STOVALL

Where does the smart money go when interest rates climb? The Federal Reserve has hiked interest rates twice since June, boosting its target federal funds rate to 5.25%. Sam Stovall, senior sector strategist for Standard & Poor's, has taken a look at which industries may thrive as yields climb.

Searching for shelter from rising rates? Look no further than health-care and consumer-staple stocks. In a study for S&P FundAdvisor

(www.personalwealth.com), I examined the performance of 44 industry sectors in 12 six-month periods following Fed rate hikes, going back to 1946. The biggest winners: major drug stocks, which averaged a six-month gain of 5.6% during rate rises and outperformed the Standard & Poor's 500-stock index in 10 of the 12 periods. In contrast, the S&P averaged a loss of 0.1% during Fed tightening. Consumer staples—personal-care products, alcoholic beverages, soft drinks, and tobacco—did slightly less well than pharmaceuticals. But each of these sectors outperformed the S&P during at least 7 of the 12 rate-hike periods, posting gains of 1.9% to 3.5%.

Health and personal-care companies are less sensitive to higher rates because demand for their products is relatively

Mutual Funds

through changing economic conditions. In dire times, people buy aspirin, cigarettes, and instant noodle soup. And while computer-hardware shares tended to do well as rates climb, with today's high valuations, I don't see technology as a safe haven. **STAPLE VOID.** Mutual-fund investors have a lot of choices (table). A fund screen run by my colleague Colette Coffman found that four of the top health-care-sector funds had positive returns when the Fed hiked rates and devalued the bond market in 1994. Fewer funds did as well on consumer staples. Coffman notes that most funds marketed as consumer-oriented are loaded with cyclical stocks, such as Home Depot, which tend to fare badly when rates rise.

The Fed has hinted it may be done with rate hikes for now. Still, I'd avoid interest-sensitive sectors. Financials, such as banks and insurance, face a higher cost of funds. Consumer cyclical goods makers face falling demand as companies slash capital outlays. Other sectors look better if the Fed keeps the economy in check.



STOVALL: Lots of health-care choices

Rate-Resistant Funds

FUND/ TICKER SYMBOL	TOTAL RETURN		
	1994	3-YR.*	12 MO.*
FIDELITY SELECT CONSUMER IND. FSCPX	-7.1%	23.6%	17.4%
FIDELITY SELECT HEALTH FSHPX	21.4	26.1	13.8
INVESCO STRATEGIC HEALTH SCIENCE FHLSX	0.9	19.9	13.3
PUTNAM HEALTH SCIENCES A PHSTX	15.2	19.6	10.1
VANGUARD SPEC. HEALTH CARE VGHGX	9.5	27.7	30.3

*Through Aug. 27 DATA: STANDARD & POOR'S

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HOW TO RETIRE FROM RETIREMENT PLANNING



BY ROBERT BARKER

My dad says he never thought much about saving for retirement. Setting aside funds for his pension, investing them, and keeping track—those tasks were his employer's lookout. Me, I spend way too much of my own time on all that. Just finding a credible answer to a basic question—what will my retirement income be?—can make me crazy.

This generation gap keeps growing as the burden of preparing for retirement shifts steadily from employers and government to you and me. "People are feeling very anxious," says Christopher Jones, strategist at Financial Engines, a new investment adviser. "You wonder: 'Am I doing O.K., or am I screwing up?'"

Relief from anxiety, I'm happy to report, is on the way. More employers, including such early adopters as Netscape Communications and Fujitsu America, are offering interactive financial-

planning services via company intranets or the Internet. The idea is to advise employees on how much to save and how best to split up those savings among a plan's investment choices. Ultimately, this personalized advice will replace the generic—and inadequate—pamphlets or seminars that have been used to coach us in running retirement portfolios.

If you work for yourself or just

want a head start, you can use some services on the Net for a fee (table). I spent the past few weeks looking at four competing 401k Forum, the first in the field; DirectAdvice.com, which advises on a broader range of issues; Financial Engines, whose software is based on the work of company founder and Nobel Prize-winning economist William Sharpe; and Standard & Poor's, which aims eventually to offer a 401(k) Advisor in conjunction with S&P Personal Wealth (www.personalwealth.com), its service for individual investors (like BUSINESS WEEK), which is a unit of The McGraw-Hill Companies.

My verdict: Interactive investment services are a quantum leap beyond what employers have offered today. At their best, they give objective advice to the puzzle of how best to split your assets among your plan's investment choices and the risk you want. For example, S&P's 401(k) Advisor suggested that if I could handle the risk, I should put nearly all my assets in company stock and stock funds. At much lower risk, I'd keep half my assets in income-generating funds. I used a demo version, but had no real idea. I might have put the recommended effect with a few clicks. No pencil work.

Just the same, these services also are not a panacea. That's why I put together this guide to help you understand what to expect:

- Do expect the tools to account for more than just your employer's 401(k) or other retirement plan. This is a big advance over older software. Chances are you have several retirement accounts, not to mention a 401(k) account. To make any rational decision, you have to consider all of them. Some tools do account for wealth you may have in other accounts.

- Do expect to come away with at least a general sense of how you're doing on the retirement. The tools all agreed that if I continued to track and retire at 66, when my Social Security kicks in, I should reach my goals. They all made it clear that if we hope to retire before 66, I'd better prepare to play Powerball.

- Do expect some fun. Each service is carefully designed, full of pop-up educational materials and calculators that were clear but not condensing.

- Don't expect to escape some tedious work. With links to your employers' records, the tools automate part of the job. But you still have to direct them to grab data from outside accounts.

- Don't expect the tools, despite their name, to leave you fully comfortable around them, to leave you fully comfortable with the advice, but it all flows from some heroic guesses. For example, how will my income grow until 2022? Beats me.

Happily, these services already plan for the future, and rivalry promises to spur new approaches: New tools, including one recently announced by Morningstar, are due soon. I wish that before my career is up, I could stop wasting so much time thinking about retirement.

For barker.online, go to www.businessweek.com/investor/ or AOL, keyword BW Daily



Point-and-Click Planning Tools

SITE/ WEB ADDRESS	AVAILABLE PUBLICLY?	PRICE
401K FORUM www.401kforum.com	No*	N.A.
DIRECTADVICE.COM www.directadvice.com	Yes	\$75 per year
FINANCIAL ENGINES www.financialengines.com	Yes	\$14.95 per quarter
STANDARD & POOR'S 401(K) ADVISOR www.sp401k.com	No*	N.A.

*These sites are available only to client companies' retirement-plan participants. Companion financial plans to S&P's 401(k) Advisor available via S&P's individual investor site, Personal Wealth, for \$9.95 a month.

DATA: BUSINESS WEEK

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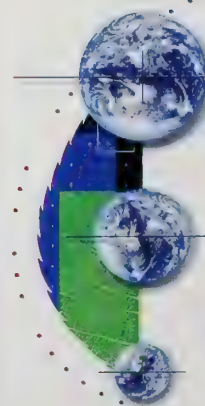
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BEFORE YOU LOG OFF...



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Like most other Net stocks, Log On America (LOAX), which streaked to 37 when it went public on Apr. 22, is way down—to 20 on Aug. 31. But don't log off, counsel some pros: Little-known Log On America has caught the eye of big Internet and telecom players.

A U.S. telecom company is set to invest \$25 million in Log On for a 10% stake, say sources close to the scene. This telecom company will help Log On build a \$100 million network for Internet and phone services in New England.

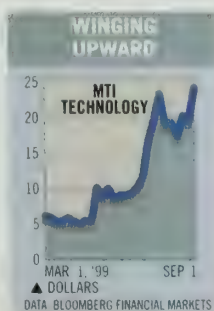
Nortel Networks, a global supplier of telecom gear, and Cisco Systems, which makes networking material for the Net, have formed alliances with Log On, which provides a full range of services, including Net access and local phones. Both Nortel and Cisco are represented on Log On's board.

Structured as a Net service provider and a "competitive local exchange carrier (CLEC)," Log On America "should be a winner in the battle for the broadband, or high-speed Internet connection, market," says Joseph Vaini, an analyst at ITM Group. A CLEC is authorized to provide local phone services in competition with "incumbent" local exchange carriers (ILECs)—such as the regional Bells.

Vaini says Log On America, which has yet to make money, aims to be a one-stop provider of Internet access and voice, data, and video transmission services. The company has been busy acquiring other CLECs. With its growth strategy, aided by a fast expanding broadband market, Log On could achieve revenues of \$50 million on an annual basis by mid-2000, he says.

He figures that, based on the market valuation of comparable companies at 6 to 10 times their revenues, Log On shares could trade at \$33 to \$54 a share in nine months or a year.

MTI: A HIGH-TECH HIGHFLIER



Shares of MTI Technology (MTIC) haven't been going the way of many tech stocks: It has been winging higher. MTI, a provider of high-performance data storage solutions, such as storage management software, to blue-chip companies, was trading at 5 in early April. It has since zoomed to 22. Part of the reason is MTI's switch to fiber channel-based technology, which allows speedier transfer of information. But more important is MTI's hid-

den asset: It has acquired a 25% stake in privately held Caldera Systems, a provider of the Linux operating system for business.

"MTI's investment in Caldera could achieve long-term value for MTI shareholders," says Brion Tanous, a senior analyst at First Security Van Kasper, a California investment bank, "based on the high valuation of Red Hat," a distributor of the Linux operating system for desktop computers. Red Hat went public on Aug. 11 at 14 a share. It soared to 52 that day and now trades at 79%.

Tanous figures that, based on Red Hat's valuation, MTI's 25% stake in Caldera is worth 21% a share to MTI shareholders. Based on that and MTI's earnings growth, he values MTI at 49. Here's an added kicker: MTI Chairman Ray Noorda, who owns 51% of MTI, also owns Caldera. The betting: Noorda will take Caldera public.

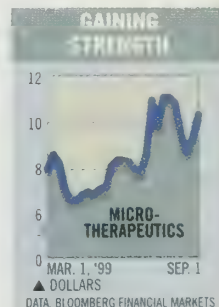
MICROTHERAPEUTICS IS ON THE MEND

With the recent swirl of takeovers in the medical devices industry, MicroTherapeutics (MTIX) is gaining new fans. "It represents the only public pure play in the more than \$1 billion neurovascular intervention market," says Sam Navarro, managing director at ING Baring Furman Selz. He notes that a number of companies have expressed an interest in MicroTherapeutics, which makes micro-catheters and micro-guidewires for the treatment of vascular ailments such as blood clots.

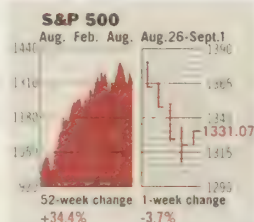
Several big companies already have bought hefty stakes in MicroTherapeutics: Abbott Laboratories owns 11.4%, Guidant has 6.3%, and Japan's Century Medical, 2.4%. The stock, which slumped to 6% on Apr. '7, has since sprinted to 10%.

Navarro says that while MicroTherapeutics' proprietary micro-catheters and micro-guidewires have become its first technology platform, its emerging embolization technology for neurovascular applications "could catapult it to become one of the most attractive takeovers in the field."

Among the possible buyers, "Guidant appears the most likely to go after MicroTherapeutics," says Joanne Wuensch, an analyst at ING Baring. "The fit for Guidant is that MicroTherapeutics would widen its reach into the neurovascular market," she says. MicroTherapeutics is developing its Onyx system for neurovascular and other applications. Wuensch expects the first case using Onyx to treat an aneurism will take place in Paris in the next two weeks. "That will be a milestone for MicroTherapeutics," she says. If it's successful, Wuensch and Navarro expect the stock to surge. Their target: 20 in six months or a year. Guidant declined comment.



STOCKS



COMMENTARY

Wall Streeters began to back off on their idea that the Aug. 24 Fed hike was the last for the year. The bond market sold off, sending long-term rates back over 6%. The quick change in sentiment hurt stocks as well. After setting a new high of 11,326 on Aug. 25, the Dow Jones Industrials jumped around over the next week, with an average move of 120 points a day.

Data: Bloomberg Financial Markets

U.S. MARKETS

	Sept. 1	% change Week	% change Year
Dow Jones Industrials	10,937.9	-3.4	39.7
Nasdaq Composite	2750.8	-2.0	74.6
Nasdaq 100	2404.9	-2.3	97.9
S&P MidCap 400	398.3	-1.6	37.2
S&P SmallCap 600	177.9	-1.3	21.8
S&P SuperComposite 1500	279.6	-3.5	33.8

SECTORS

	Sept. 1	% change Week	% change Year
S&P/BARRA Growth	763.4	-3.1	38.8
S&P/BARRA Value	590.0	-4.3	28.2
S&P Basic Materials	129.7	-3.9	24.6
S&P Capital Goods	1010.8	-3.5	36.8
S&P Energy	865.8	-2.7	32.0
S&P Financials	131.2	-6.5	21.6
S&P REIT	80.4	0.3	-5.6
S&P Transportation	636.8	-6.9	9.1
S&P Utilities	256.5	-2.7	8.3
GSTI Internet	402.1	-9.0	233.5
Morgan Stanley Cyclical	577.2	-3.1	42.1
PSE Technology	629.4	-1.5	112.1

BEST-PERFORMING GROUPS

	Last month %	Last 12 months %
Instrumentation	18.2	Semiconductors 158.9
Semiconductors	13.3	Instrumentation 141.2
Metals	9.1	Computer Systems 97.9
Aluminum	9.0	Communications Equip. 93.1
Drugs	8.1	Aluminum 82.6

GLOBAL MARKETS

	Sept. 1	% change Week
S&P Euro Plus	1350.0	-1.3
London (FT-SE 100)	6276.2	-1.5
Frankfurt (DAX)	5317.1	-1.5
Tokyo (NIKKEI 225)	17,802.5	-0.3
Hong Kong (Hang Seng)	13,544.2	0.5
Toronto (TSE 300)	6978.3	-3.4
Mexico City (IPC)	5086.9	-5.4

FUNDAMENTALS

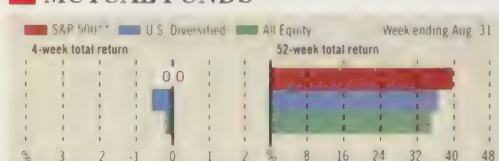
	Aug. 31	Week ago
S&P 500 Dividend Yield	1.24 %	1.20 %
S&P 500 P/E Ratio (Trailing 12 mos.)	31.1	32.2
S&P 500 P/E Ratio (Next 12 mos.)*	23.2	24.1
First Call Earnings Revision*	-0.32 %	-0.04 %

*First Call Corp.

TECHNICAL INDICATORS

	Aug. 31	Week ago
S&P 500 200-day average	1289.1	1059.9
Stocks above 200-day average	38.0 %	15.0 %
Options: Put/call ratio	0.56	0.81
Insiders: Vickers Sell/buy ratio	1.36	1.03

MUTUAL FUNDS



Data: Morningstar, Inc.

**Vanguard 500 Index fund

EQUITY FUND CATEGORIES

Leaders	Four-week total return	%	Laggards	Four-week total return	%
Technology	7.4	Financial	-3.8		
Japan	4.2	Mid-cap Value	-2.9		
Health	2.9	Utilities	-2.8		
Precious Metals	2.6	Small-cap Value	-2.7		
Natural Resources	2.2	Large-cap Value	-2.4		
Leaders	52-week total return	%	Laggards	52-week total return	%
Technology	130.2	Real Estate	5.4		
Pacific/Asia ex-Japan	97.2	Europe	11.8		
Japan	86.2	International Hybrid	14.2		
Diversified Pacific/Asia	77.0	Small-cap Value	17.2		
Communications	71.9	Domestic Hybrid	17.4		

INTEREST RATES

KEY RATES	Sept. 1	Week ago	Year ago
MONEY MARKET FUNDS	4.77%	4.72%	5.11%
90-DAY TREASURY BILLS	4.93	4.93	4.91
1-YEAR TREASURY BILLS	5.28	5.14	4.91
10-YEAR TREASURY NOTES	5.98	5.73	5.10
30-YEAR TREASURY BONDS	6.08	5.87	5.34
30-YEAR FIXED MORTGAGE†	8.00	7.76	6.83

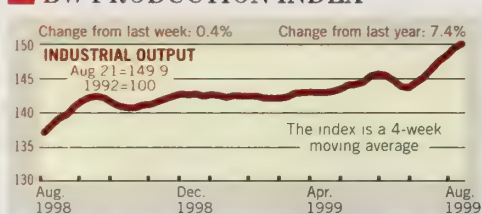
BLOOMBERG MUNI YIELD EQUIV

Taxable equivalent yields on AAA-rated, tax municipal bonds, assuming a 31% federal tax rate.

10-yr. bond 31%	15.89
GENERAL OBLIGATIONS	4.89%
TAXABLE EQUIVALENT	7.09
INSURED REVENUE BONDS	5.11
TAXABLE EQUIVALENT	7.41

†BancQuote, Inc.

BW PRODUCTION INDEX



Information on each of the index components is at www.businessweek.com.
BW production index Copyright 1999 by The McGraw-Hill Companies

The production index continued to rise last week ended Aug. 21. Before calculating a four-week moving average, the index rose 0.4%, to 150.3, from 149.7. After adjustment, both auto and truck production were up as U.S. vehicle sales in August continued to cruise higher. Crude-oil prices rose 2%, and refiners were operating at capacity. Coal, lumber, and rail-freight prices also rose. Electric power production was up.

THE WEEK AHEAD

INSTALLMENT CREDIT Wednesday, Sept. 8, 3 p.m. EDT ► Consumers probably added \$4.5 billion in new debt in July, says the median forecast of economists surveyed by Standard & Poor's MMS, a division of The McGraw-Hill Companies. Consumers added only \$2.8 billion in debt in June, but that followed a massive \$11.7 billion increase in May. The debt binge is an expected offshoot of the ongoing consumer spending spree. With people feeling wealthier because of rising home values or stock prices, households are borrowing much more freely than they did earlier in the decade. As a percent of disposable income, installment debt is at a near-record 21.3%.

EXPORT-IMPORT PRICES Thursday, Sept. 9, 10 a.m. EDT ► Prices of all exports were probably unchanged in August, after slipping 0.2% in July. Total import prices likely jumped 0.4% in August, on top of a 0.9% gain in July. Higher energy prices are lifting overall import costs. Excluding oil, import prices fell 0.1% in July, and another drop is likely for August. Thanks in part to a strong dollar, import prices have been falling for four years. The deflation has helped to keep overall U.S. inflation quite low.

PRODUCER PRICE INDEX Friday, Sept. 10, 8:30 a.m. EDT ► The S&P MMS median fore-

cast is that producer prices for finished goods edged up 0.2% in August, lifted in part by higher energy prices. Excluding the volatile food and energy sectors, the core index likely rose 0.1% last month. July, the overall producer price index rose 0.2%, while the core index was unchanged. Over the past year, both total producer prices and core prices have risen by less than 2%.

BusinessWeek ONLINE

For more investment data and the components of the production index, visit www.businessweek.com.

ives the starting page for a story or
a significant reference to a company.
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Mixing Business with Pleasure by Lincoln

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Answers from puzzle #17
in Business Week.

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THE GREAT BUBBLE DEBATE

*Double, double toil, and trouble;
Fire burn, and cauldron bubble.*

Federal Reserve Chairman Alan Greenspan worried out loud about stock market bubbles at the recent annual economic "Fed camp" in Jackson Hole, Wyo. In an intellectual tour de force, Greenspan ruminated about the nature and impact of financial bubbles: Measuring overvaluation is an impossible task, and past attempts to prick asset bubbles with higher rates—in the U.S. in the '20s and Japan in the '80s—proved disastrous. He wisely concluded that while stock prices had become an independent force in the economy, the Fed should not use monetary policy to do much about them. Bubbles remain mysterious things, he said—unpredictable and identifiable only after the fact. Is Greenspan right? We believe so, but others disagree.

SIGNS OF TROUBLE?

It all depends on how you view the New Economy. For most of the '90s, mainstream economists rejected the notion of a New Economy. With sustained productivity growth of 2% annually—twice the level of the previous two decades—they have recently become converts. The discussion is no longer about the existence of a New Economy but about what it means for the stock market. We think that an information-based economy generating greater productivity and profitability can probably sustain higher stock market valuations than recent historic norms. Again, others disagree. Here are the two key issues in the bubble debate:

■ Does the New Economy justify sky-high price-earnings ratios, or will it generate a classic stock market bubble? A study called "Bubble Trouble" by HSBC economist Stephen King shows that four modern bubbles—in Britain, Japan, Mexico, and Spain—were associated with low inflation, high productivity, a strong currency, above-average economic growth, and talk of "new eras." Sound familiar? Low price inflation, coupled with robust economic growth, lulled policymakers into keeping monetary policy too easy, too long. Assets inflated, and the bubble burst. According to HSBC, the U.S. is clearly in this kind of bubble. Watch for the pop.

Not so, finds an equally persuasive study, "The IT Revolution and the Stock Market," by Jeremy Greenwood of the University of Rochester and Boyan Jovanovic at New York University. They readily grant that p-e ratios are plenty high. But Greenwood and Jovanovic say the market is simply forecasting higher future output, productivity, and earnings. If that's true, then the sharp runup in stock prices represents a positive estimate about growth in future profits. The info-tech revolution will add value to the stock market for a long time. So high p-e's are justified. Forget the bubble.

■ Is the high-tech, high-productivity revolution confined to a narrow sector of the economy, or is it pervasive, transforming virtually every industry? If the New Economy is Netcentric,

then the high p-e's in the broad stock market are high, and a bubble exists. But if productivity is throughout the economy, then a 31 p-e for companies S&P 500-stock index looks more reasonable.

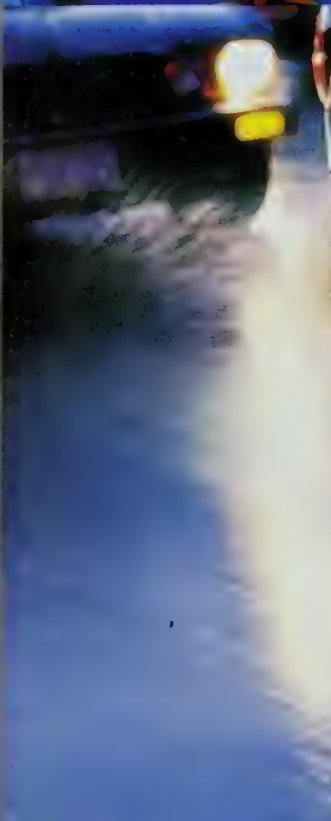
Robert Gordon, a Northwestern University heavy economist, argues that nearly all the recent productivity gains have taken place in the computer industry. Figures show virtually no productivity acceleration in the rest of the economy. His research is bolstered by Clayton Christensen, who, in his best-selling book, *The Innovator's Dilemma*, argues that Old Economy companies invariably get sidetracked by disruptive technologies and can't adapt. "The competent decisions of management that are critical to the success of their companies are also the reasons why they lose their positions of leadership," Gordon and Christensen say. They also support the view that the New Economy is limited mostly to a narrow sector of the economy, and the stock market as a whole is overvalued. The bubble is here.

But CEOs across America believe Gordon and Christensen underestimate the ability of brick-and-mortar companies to transform themselves into hip New Economy hotshots. Wal-Mart can sustain superstock p-e's. Venerable Charles Schwab has transformed itself into the biggest online discount broker. Gap Inc. is one of the biggest retailers on the Net. Telex Corporation and equipment maker Cisco Systems Inc. may do 78% of their business over the Net (page 128), but Ford Motor Company used the Net to boost sales per employee some 25% over the last two years. Electronic commerce appears to be not only creating new companies but also changing the way Old Economy companies do business. To them, the past is not prologue. A bubble is not inevitable.

A WIDESPREAD REVOLUTION

BUSINESS WEEK bets that the Information Revolution is probably having a widespread—not a narrow—impact on the economy. But adapting to a new technological base takes time. No one knows how long this Information Revolution will take, or what will happen along the way. That's why there is so much debate about the New Economy, productivity, and bubbles. We believe that stocks warrant higher valuations today than in the past, thanks to the New Economy, but not to the extent of not knowing how much higher. The recent shakeout in Internet stocks shows that investors are also making their own calculations.

So feel free to join the bubble debate. For Greenwood's Jackson Hole speech, see the Web site www.federalreserve.gov/econ/rochester/rochester.htm; and for Gordon's "Has the New Economy Rendered the Productivity Slowdown Obsolete?" see www.nyu.edu/economics/gordon. The issues are complex. There's a reason why Alan Greenspan, in an especially thoughtful and candid moment, decided to speak out loud.



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BRAIN DRAIN

With older executives set to leave the workplace in droves, Corporate America is facing a dramatic talent shortage. Here's what smart companies are doing to keep their senior stars on the job.

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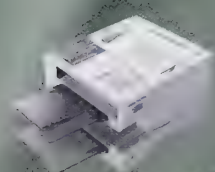
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w i t h T e c h n o l o g y

Sept. 1999

Equitable Companies Incorporated becomes AXA Financial, Inc. now trades as "AXF" on NYSE

1998

Equitable Companies market cap exceeds \$10 billion. ROE over 15%.

1995

AXA becomes world's largest insurance company as measured by assets under management.

1992

Equitable Life completes largest de-mutualization in U.S. history and The Equitable Companies begins trading on NYSE.

1991

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1985

Equitable Life acquires DLJ and Alliance Capital.





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COVER STORY

BRAIN DRAIN

Keeping senior stars on the job will require more flexible management. Is business ready? page 112

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Big new costs for access provider MindSpring

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BusinessWeek

SEPTEMBER 20, 1999

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America is aging. Soon, baby boomer execs will be leaving the workplace in droves. And there aren't enough young workers to fill the gap. So companies are tapping the vast resources of their older workers—by scrapping age limits and setting up “bridge periods” between full-time employment and retirement

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Up Front

EDITED BY ROBERT McNATT

CAMPAIGN 2000

THAT TIDAL WAVE OF COMPASSION

IT'S HIS CAMPAIGN MANTRA: George W. Bush = Compassionate Conservative. He repeats it so often you'd think he coined the phrase. Think again.



COMPASSION FEVER: Bush, Dole, and Bush all caught the bug

One of Bush's rivals for the Republican Presidential nomination, Utah Senator Orrin Hatch, first used the term in 1981. "I'm a conservative, and proud of it, but I'm a compassionate conservative," Hatch told *The New York Times* after saving the Jobs Corps from the Reagan budget knife.

In the nearly two interven-

ing decades, a parade of right-of-center pols or their handlers have attempted to soften their images by invoking the catchy phrase. Among them: Newt Gingrich (1989), televangelist Pat Robertson (1988), both Bob Dole (1987) and Elizabeth Dole (1997), House Speaker Dennis Hastert (1986), former Hous-



ing & Urban Development Secretary Jack Kemp (repeatedly), and ex-Representative Robert "B-1 Bob" Dornan (1995).

The label was even attached to the first George Bush. Back in 1987, the then-Vice-President's media consultant Roger Ailes, now CEO of Fox News, told the *Times*: "George Bush is a conservative and a compassionate man. There's nothing mutually exclusive about it." Seems that George W. is indeed a chip off the old block. *Richard S. Dunham*

THE LIST WHO BRINGS HOME THE SHEEPSKIN?

As their participation in the workforce has increased, women have also become better educated than men. Since 1982, they have earned more bachelor's degrees than men. And by 1996, according to this recent study, women earned a majority of the BAs awarded in every state of the union except Utah. Women increased their share of degrees from both public and private schools. Of 17 broad academic disciplines, these are the fields that have seen

the largest increase in the percentage of women getting undergraduate degrees:

	1970	1996
PSYCHOLOGY	43.4%	73.0%
COMMUNICATIONS	35.3	58.8
BIOLOGY/LIFE SCIENCES	29.7	52.7
BUSINESS	8.7	48.6
AGRICULTURE	4.2	36.8
ARCHITECTURE	5.3	36.1
PHYSICAL SCIENCES	13.6	35.9

DATA: NATIONAL CENTER FOR EDUCATION STATISTICS/THE COLLEGE BOARD

TALK SHOW "You can choose either kidney. Buyer pays transplant and medical costs. Of course only one for sale. Need the other to live."

— "hchero," who attempted to auction his own kidney on the eBay Web site

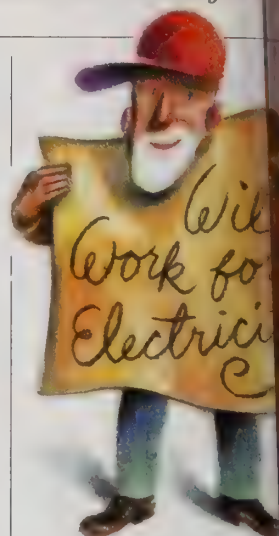
POINTS OF LIGHT

KEEPING THE HOME FIRES BURNING

IT'S HARD TO GET WARM AND fuzzy about the unsavory realm of bill collecting. But a new program funded by Illinois Power and the state of Illinois has pumped some do-good vibes into the way low-income customers pay off their debts. Now, that program is looking to go national.

A Hand Up, based in Decatur, Ill., allows customers to pay off overdue bills by volunteering at one of 85 local nonprofit outfits, such as thrift shops or housing authorities. For each hour's work, A Hand Up wipes away \$10 of debt owed to the utility, landlord, or other creditor. "The philosophy is to help them help themselves out of a crisis," says founder Sharon Durbin, a former Illinois Power customer-service rep who for years fielded calls from desperate billpayers.

Launched in 1998, A Hand Up has attracted 1,000 par-



ticipants so far. The utility says it decided to go national after other utilities as far afield as Tennessee, Vermont, New York, and California contacted it. It wants to begin the national rollout in spring, 2000. "It's a step toward a real solution," says Sandra Hurd, a late casino worker in Collins, Ill., who received help through A Hand Up. "It's a maybe bill-collecting call sort of warm and fuzzy after all." *Dennis Ber*

FOOD STUFF

A SAUCY LITTLE COMPANY HITS IT BIG

JAPANESE COMPANIES HAVE traditionally looked to foreign markets for success. Yet while carmakers and consumer-electronics outfits struggle for the U.S. dollar, one unheralded company has hit it big. Kikkoman is making a killing in soy sauce, thanks to Americans' changing tastes.

Americans consumed some 40 million gallons of soy sauce last year, and the market has grown steadily for the past 25 years at a 10% annual clip. That's benefited Kikkoman, which specializes in naturally brewed soy sauce. Its main American rivals, such as La Choy, make

chemically manufactured brands—a different market segment, say analysts. "There is little competition in the American market," for Kikkoman, says Yasuo Ariga, industry analyst at Crediton Securities (Japan).

Half of Kikkoman's \$400 million operating profits in the first half of 1999 came from the U.S., a big part of the expected 15% rise in net income for this year. Sales of \$2.1 billion annually, expected to grow 5% this year. So far, none of the 2,000 other Japanese soy sauce makers has made a big push into the U.S. But when they sniff the sweet scent of the lucrative market, they could update the count with new soy sauce brands. *Miki Tanikawa*



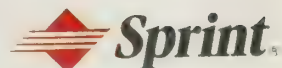
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BROADCAST NEWS

THE FCC TRAINS ITS CANNONS ON PIRATES



FOR A CLUSTER OF BROADCASTERS in Florida recently, "sweeps" meant something quite different from the period when audience size is measured. In August, the Federal Communications Commission shut down 20 "pirate" radio stations that were allegedly using low-power transmitters to aid drug-smuggling ships, help transport boatloads of illegal immigrants, and relay coded messages to burglars operating in the area.

CLASS NOTES

SCHOOLS GET INSIDE JOCKS' HEADS

FOR YEARS, LOW GRADES or SATs have meant that collegebound jocks miss a year of play. If one psychologist gets his way, kids might be sidelined for flunking a mental assessment exam as well.

The 20-minute Troutwine Athletic Profile (TAP), created by industrial psychologist Robert Troutwine, has been used since 1986 by the National Football League to see if new players can fit into the team and be motivated. Answers to true/false questions like "I would rather fail at a task than give it up" (true is usually better) can help coaches get the informa-



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Of the station personnel busted in the August sweep, many are now in federal custody, awaiting trial on drug and smuggling charges—as well as for operating a radio station without a license.

Dennis Blank

tion they need to get the most from players.

Colleges are testing enrolled players with the TAP and want to test recruits, too. The University of Georgia, already uses it and likes it. "When a guy has a \$14,000 scholarship and this test is going to help him on the field and in the classroom, we're going to do it," says Jim Donnan, the Bulldogs' head football coach. Other schools, like Michigan State have also used the test.

Troutwine says many middle and high schools are leery of using psychological tests on their students. But he contends that "good psychology will win you games." Perhaps. But administering the test won't always win you friends. *Mica Schneider*

DRAWN & QUARTERED



TRADE WINDS

BIG STINK OVER A FISHING SUBSIDY

THERE'S MORE AT STAKE IN the latest U.S.-Europe trade war than money and jobs.

A recent report by the World Wildlife Fund found that big European fleets are depleting the Atlantic of swordfish, Patagonian toothfish, and other species. All told, 60% of the world's commercial fish stocks are endangered. The main villains, says the WWF, are European Union countries like France, Britain, and especially Spain, that offer huge subsidies for fishing boats. The subsidies total \$1.5 billion a year, or \$15,000 a boat, on average, in all of Europe. Because the subsidies are

linked to the purchase of vessels and fishing rights in distant waters, a disproportionate amount of aid goes to the largest and most powerful trawlers. Taxpayer money thus provides huge incentive to overfish, says the WWF.

The U.S. will call for a halt to these subsidies in World Trade Organization talks opening later this



DISASTER? Endangered Atlantic

The Europeans have refused to cut subsidies, fearful that many of their coastal regions will collapse without the aid. But overfished fishermen could be fishing themselves out of business. *William Echlin*

THE BIG PICTURE

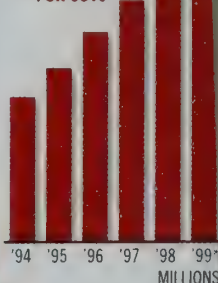
SUVs ARE LOSING TRACTION

The boom in sport-utility vehicles (SUVs) is cooling off. After growing 15% in 1997 and 13% last year, sales have grown only 6% so far this year. Luxury SUVs are taking up some of the slack, however, with sales growing at 26%.



DATA: POLK CO.; NEXTREND INC

NEW U.S. RETAIL REGISTRATIONS FOR SUVs



*ANNUALIZED FROM DATA THROUGH J

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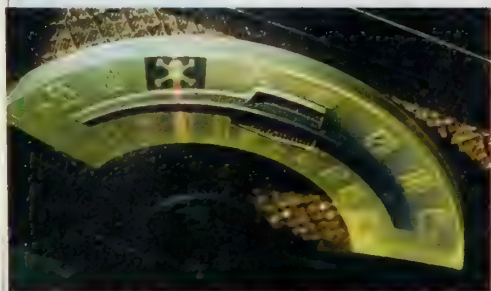
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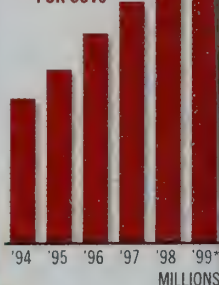
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A FEW MORE IDEAS FOR THE 21st CENTURY

There is an obvious answer to Idea 16 in "21 Ideas for the 21st Century" (Cover Story, Aug. 23-30). One solution to the birth dearth and impending labor shortages that result from a shrinking workforce is to draw on the talent pool of retired workers.

While people are living longer and in better health, it is an anomaly that around 70% of Social Security beneficiaries start to receive benefits before reaching 65. There are almost 41.6 million Americans between the ages of 55 and 75, many of whom are retired workers who would like to continue working on a part-time basis. Why not draw on this rich talent pool of people with experience, expertise, seasoned judgment, and proven performance?

William K. Zinke
Boulder, Colo.

As I read the predictions of exponential growth in the power of electronic systems, offering a technological utopia of science-fiction proportions, I couldn't help but think of a quote from a popular TV sci-fi series: "Resistance is futile. You will be assimilated."

Paul Grunert
Benicia, Calif.

Your story should be required reading for every elected official in the nation. I found your ideas about cities and the effort to combat urban sprawl and the commentary about direct democracy very interesting. In the town of Greenburgh, N.Y., we passed a referendum two years ago authorizing the establishment of an open-space fund. A few weeks ago we acquired a new, 123-acre park. We have agreed to acquire another large parcel of open space.

Our town also has been on the cutting edge of direct democracy. Over five years ago, we invited residents to watch our town board meetings on TV and to call in live during our legislative sessions without being pre-screened. *Dial Democracy* has helped us in our

efforts to be more accountable to residents. Residents appreciated that they can participate in the government from the comfort of their living rooms.

Paul
Greenburgh, N.Y.

I find some of your ideas quite different from others a bit more interesting and more relevant. However, in no place is there allusion to what may be the most important problem of all facing the world in the 21st century, namely, global warming. The scientific evidence is accumulating that this effect is accelerating, and is likely to have dramatic effects on our environment.

Perhaps one of your experts should have proposed some way in which these problems might be reduced by initiating measures now, before they get beyond our control. Greater use of nuclear energy, solar energy farms, wind cells, and any other energy system that do not involve the wholesale burning of fossil fuels should be considered. But perhaps this is too sensitive an issue politically and economically to pursue.

Robert Lids
Wethersfield, Conn.

Your special double issue is outstanding for its open-mindedness and its admission that there are no certainties when we look to the 21st century.

In curious contrast, in the same issue there is an advertising feature on Mozambique, an impressive African country but as yet too dependent on World Bank patronage.

A 22nd door to the future could have been a vision of new ways to raise human development of the poorest countries of the world. During the next century, the greatest challenge may well be the need for more socially and economically balanced conditions for the whole of humanity. May we hope that the Internet will serve to spawn all kinds of movements to that end?

Frederico Monteiro Da Silva
Cascais, Portugal

Business Week

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LECTIONS & CLARIFICATIONS

photo enlargement," (Inside Wall, Sept. 6), two charts were inadvertently switched. The first chart on the page ad to the second item, "Middlesex Thirsty neighbors?" and the second belonged with the first item on Con-Camera.

Mexico's opposition parties stop op- g each other?" (International Outlook, 13) should have stated that Mexican ition parties control 9 out of 31 state norships.

northwest of Napa, a road less trav- (BusinessWeek Lifestyle, Sept. 13), correct telephone number for Bistro h in Healdsburg, Calif., is 707 433-

line was omitted from "Sniffing out planner for you," (BusinessWeek In- or, Sept. 13). The article was written by Furchgott.

ur article will go down as a clas- with its revelations of technological res, especially as over the next years many of these technologies developments become manifest. 12 on Artificial Intelligence: "Mas- es will be smarter than we are," is especially provocative. However, I d like to challenge the researchers figure that intelligent machines not a potential threat to humanity use "such beings would be too not to respect life in all its myri- forms" and because such beings ld not be malevolent because they be sexless, undying machines that ldn't compete for territory and es.

efore anything else, with a daunt- perilous issue such as man vs. ma- e, it is best to be a pessimist and e precautions that ensure humani- safety. It is not comforting to read e the genius creators and re- chers of such machines are them- es haunted by the possibilities of r creations.

align myself with the researchers o fear the worst. I believe that e intelligent machines will be ca- ple of subjugating or exterminating narity. They can be programmed, ght, or learn to be malevolent. I uld be shocked if these machines— h with the intelligence of billions of nan brains—would not be able to against humans. We can hope that ir wisdom would put them above h acts, but I am not willing to rest fate on hope.

Furthermore, these hybrids may have many of the same needs as full- fledged human beings. It is plausible that these intelligent machines will cov- et power, intelligence, territory, mates, and so forth—and to dismiss that possi- bility is myopic. The advent of these intelligent machines is looming. We need to heed the trepidations of some creators and researchers and advance with extreme caution.

Krystof R. Mis
Latham, N.Y.

TWO UNIVERSITIES LEAD IN D.C.'S HIGH-TECH TANGO

I read with interest "Between Sili- con Valley and Silicon Alley" (Informa- tion Technology, Aug. 23-30), on the emergence of the Washington, D.C., area as a center of high technology. I want to take issue with the observation that the Greater Washington region lacked a ma- jor technology research university.

I am relatively new to the University of Maryland, having come here in May,

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1998, as its first chief information officer, from the University of Minnesota. After 22 years there as a faculty member and the last six years as associate vice-president for academic affairs, I am familiar with the criteria necessary to be considered a major research university. The University of Maryland, located just a few miles from the nation's capital, is a highly ranked research university, with nationally ranked programs in engineering, business, entrepreneurship, computer science, and other disciplines, with its faculty winning over \$200 million in research contracts and grants annually. We have strong research and development relationships with a number of significant federal labs, including NASA, NIST, DARPA, NSA, and NIH.

Leading research universities produce not only good research but also technology leaders. Two of the companies mentioned, including Yurie Systems Inc., which was sold to Lucent Technologies Inc. for \$1 billion, were started by former University of Maryland students. And I can't help mentioning that the new chief executive of Hewlett-Packard Co., the first woman to head a Dow 30 company, is also a University of Maryland alumna.

Donald R. Riley
Associate Vice-President and Chief
Information Officer
University of Maryland
College Park, Md.

Your article on Washington's high-tech identity was a good overview. You missed what's going on at Georgetown University in advancing the region's information economy. The Communication, Culture, and Technology Program (CCT) in Georgetown's Graduate School, now in its fourth year, has grads working in several information and communications companies in the region.

CCT is also developing a new Internet "incubator and entrepreneurship" center, the Georgetown Knowledge Lab, through alliances with the regional business community. We're finding that the current information economy is more about applications, new business ideas, new services, and value-added content than about Moore's law-driven hardware. This is where Washington can be a leader. By the way, we're the Digital Beltway, not the Silicon Swamp.

Martin Irvine
Associate Vice-President for
Technology Strategy
Georgetown University
Washington

LOCK IN THOSE 1999 INSURANCE RATES

I applaud you for running the article "So you think you're covered" (BusinessWeek Investor, Aug. 23-30). It's refreshing to read a consumer-oriented article on life insurance that avoids the temptation to bash life-insurance companies and agents. The article is timely and addresses a serious problem that will be faced by many consumers—after it's too late.

My firm is a large independent life-insurance brokerage company that agents come to for companies and policies that can be used to "rescue" clients whose policies are "imploding." Over the past few years, we have trained countless independent life-insurance agents, financial planners, certified accountants, and other financial professionals throughout the country to identify policies that are in danger of collapsing. We teach them how to determine what the client's needs are and what kind of information to get from the life-insurance company regarding the future projections of the policy. We also teach them the various options you mention, including increasing the premium, reducing the coverage, as well as exchanging the policy for a new, lower-cost policy.

Earlier this year the National Association of Insurance Commissioners (NAIC) adopted a regulation scheduled to become law on Jan. 1, 2000. The regulation is known as Triple X, and it changes the way reserves are calculated on policies that guarantee low current premium rates for more than five years. Policies issued before the end of 1999 will be grandfathered.

The net effect of this regulation will be to increase the premiums from 20% to 50% higher than pre-XXX policies with 20-year rate guarantees. The premiums for lifetime rate guarantees can be so high that the cost becomes prohibitive. Unfortunately, policyholders only have a short time to lock in pre-XXX rates before the new law goes into effect. It's ironic that just as the need for rate guarantees becomes more obvious, the cost goes up.

Bill Zimmerman
President
LifePro Financial Services Inc.
Solana Beach, Calif.

HOW'S THIS FOR ELECTORAL REFORM: FREE TV TIME

"Why Washington won't clean up its act" (Books, Aug. 23-30) reveals new reasons why our election process must

be reformed. Surely we deserve better than government according to the lowest bidder. As the system now is, our Congress members must spend much of their time raising money in order to stand for reelection.

The time has come when the electoral process must demand that reforms be enacted. There is no reason why the enormous sums spent on advertising cannot be eliminated, providing each candidate limited free time on public television together with limited free mass mailings. The current system serves no useful purpose other than the attempt to achieve parity between the other candidates and unfavorably incumbents.

Maybe if we can rid ourselves of cancer on our national government, we can return to being a representative democracy, and maybe the members of both parties will be freed of the partisanship that causes them to continually misrepresent their positions and that of their opposition in matters of national interest.

Paul D. ...
Statesboro

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DEVELOPMENT AS FREEDOM

By Amartya Sen

Knopf • 366pp • \$27.50

DO LITERACY AND HEALTH SPARK GROWTH?

When economist Amartya Sen was growing up in Bangladesh, a poor Muslim day laborer stumbled into the garden where Sen was playing. Bleeding profusely and screaming, the man said that he had been knifed by some thugs in the largely Hindu neighborhood. Sen, just 10 years old, fetched him water, and his father rushed the victim to the hospital. Before he died, the man moaned that his wife had warned him not to go into a hostile neighborhood, but because his family had nothing to eat, he had to take any job he could find. "The experience was devastating for me," Sen says. "The penalty of his economic 'unfreedom' turned out to be death."

Nearly a half-century later, Sen, who in 1998 received the Nobel Memorial Prize in Economic Science for his studies on the causes of poverty and famine, is still moved by the extreme want he witnessed as a youth. Long recognized as one of the most compassionate voices in development economics, the Cambridge University dean has just completed a book, *Development as Freedom*, that presents a new approach to combating these ills. Traditionally, success in the fight against privation has been gauged by the rise in income levels. But Sen argues that economic growth translates into better, longer lives for people only if governments embark upon well-thought-out social-development programs that guarantee certain liberties: freedom from hunger, illiteracy, premature death from lack of health care, and the tyranny of undemocratic governments, which tend to ignore the poorest.

It's a refreshing, thoughtful, and human approach, and this idea-laden book is sure to spark renewed debate. For some time now, many governments have taken a hands-off, free-market attitude toward poverty: The globalization of the

world economy, they say, "should spur growth and incomes, lifting up the poor. East Asia was the poster child: There, economies grew 7% to 10% annually from the mid-'70s to the mid-'90s, and severe poverty was reduced from 60% of the population to 20%. But the recent financial crisis shows that globalization can be a two-edged sword for countries not fully prepared to compete. The World Bank says as many as 60 million Asians may fall back onto the lowest rungs of the income ladder.

Ultimately, though, East Asia should do well, Sen says. Why? During the years of high economic growth, its governments invested heavily in schooling and medical care—even before they had conquered poverty. That, argues Sen, refutes the belief "in some policy circles that human development is really a kind of luxury that only richer countries can afford." On the contrary, poor nations cannot afford to ignore social ills if they want to be competitive today.

But many governments, under pressure from the International Monetary Fund to cut their budgets, have postponed social spending. That's a mistake. "If the world's population is half illiterate, and women are kept in their households, then you will have a world in which globalization opportunities are seized by some but completely useless, or maybe even worse, for others," he says. To illustrate the point, he contrasts China and India. "While pre-reform China was deeply skeptical of markets, it was not skeptical of basic education and widely shared health care," Sen notes. So when China began turning to open markets back in 1979, it already had a well-educated workforce.

Not so in India, where the introduction of market reforms in 1991 found India's adults illiterate and therefore less able to seize the opportunity.

Sen has been criticized for taking a broad approach. Indeed, this wide-ranging discussion of everything from military spending to food ration is dense in parts and may appeal more to academics and policy makers than to general readers. But Sen's optimism and no-nonsense proposal leave one feeling that perhaps there is a solution. Readers may feel they're returning to one of his university lectures complete with colorful references to Dickens, Adam Smith, and Aristotle. Still, the abstractness of Sen's "freedom" argument sometimes leads to apparent contradictions: While he criticizes repressive China for its one-child policy, he praises its record on education and health care, leaving one to wonder whether Sen is right about democracy's key role in the eradication of poverty.

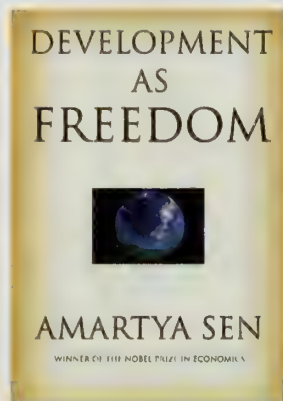
Although the sheer numbers of people living in poverty seem overwhelming—at least 3 billion subsist on less than \$2 a day—Sen is optimistic that progress can be made over the next few generations. "It's within our power to eliminate poverty," he told me during a recent telephone conversation. But whether we do it or not depends on whether we seize the problem the right

way." The world's "rich" nations can help by moving ahead with debt-reducing schemes, so that countries, as many in Africa, are not forced to spend as much as 40% of their income on debt service, Sen says. But governments in developing countries also must cut back on military spending and corruption and spend more on health and education, especially for women.

In the end, he says, it boils down to why countries seek economic growth in the first place. In Sen's mind, social growth and development are meaningless unless they enhance "our capability to lead the kind of lives we have reason to value."

BY GERI SMITH

Smith is BUSINESS WEEK's Mexico City bureau chief.



POOR NATIONS CANNOT AFFORD TO IGNORE SOCIAL ILLS IF THEY WANT TO BE COMPETITIVE

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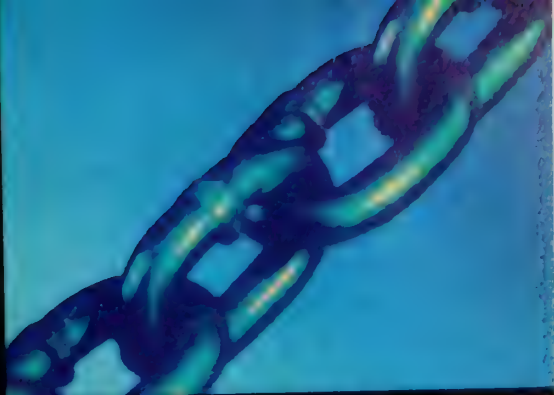
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EPHEN H. WILDSTROM

WANTED: BETTER JOB LISTINGS

E-recruitment sites are too jargony and unwieldy to hook employee candidates

Labor markets are tight, and finding candidates, especially for tough-technical jobs, is expensive. That makes the World Wide Web look like a dream finding tool. But it doesn't feel nearly as attractive if three of every four on-line job seekers give up in frustration before submitting an application.

But, however, is the failure that Web consultants

Hurst of Creative Good and Jakob Nielsen of Nielsen Norman Group found in *E-recruiting: Online Strategies for the War for Talent*, a study of six corporate recruiting sites. In a series of tests with dozens of "average" Web users, the job seekers called up a comparison recruitment site and tried to find and apply for a job that suited their interests and talents. They failed in completing an application 26% of the time.

WHAT TO FIX. These results should set off a scramble among companies that rely on-line to recruit their sites. In these days, that includes just about any company bigger than mom-and-pop operation. Fortunately, pervasive problems detailed in *E-recruiting* don't include all that difficult or correct.



One of the most common causes for the difficulty faced by job seekers was the failure of designers to see the sites the way outsiders would. "The biggest mistake is to believe that candidates know a lot about your company," says Nielsen. "The average candidate is not very well versed in human resources terminology and con-

cepts, and the more the site contains unfamiliar terms, the greater the chance people will click on the wrong thing."

For example, a job I found posted on Citibank's site was called "Director MNCC Information Management," inscrutable even without the typo. People who work for Citi may know what MNCC is.

But I had to click to another page and read six paragraphs down to learn that the job had something to do with credit-card management—and I still don't know just what.

Another common problem was one that recruitment pages share with corporate Web sites in general: excessive use of graphics that add no real information and make

pages very slow to load. For example, Procter & Gamble, a company whose sheer size makes designing a recruitment site difficult, offers a link called "U.S. Locations." Clicking it takes you to a large, slow-loading map with the states where P&G has facilities highlighted. Clicking on a state finally takes you to the actual list of company locations.

Poor design sometimes stopped job

seekers short of the critical task of completing a job application. Cisco Systems' site offers a novel tool called the Profiler. Would-be applicants fill in forms with personal and professional information, and the system comes up with a list of job openings tailored to the individual's interests and qualifications. Unfortunately, applicants tended to get lost in a confusing section where they were supposed to fill in their employment history. Elsewhere, clicking on links seeming to offer additional information produced "file not found" errors. The likely real-world result is that good prospects end up not applying for jobs.

Granite Rock, a mid-size California construction firm, undermined an otherwise simple, solid recruiting site by not even offering an on-line application. Instead,

applicants have to download and print an application. To do that, they first need Adobe Acrobat Reader, itself a 5.5 megabyte download.

Interestingly, most of these defects are not technology failures. Instead, they result from poorly thought-out designs, inadequate testing, and most important, an inability to see things through an outside applicant's eyes. As co-author Hurst puts it: "Make it easy for the candidates. Don't design for anyone other than job-seekers."

The good news is that relatively simple fixes can yield impressive improvements. "If your competitors are doing it all wrong, you can beat them just by having a better site—and save \$8,000 per hire," estimates Hurst. That could be a very big payoff for getting the basics right. More information is available at www.nngroup.com and at www.creativegood.com, where you can order a full copy of the report for \$1,850. □

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DATA: CREATIVE GOOD INC.



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TOYOTA People Drive Us

BY LAURA D'ANDREA TYSON

A MASSIVE TAX CUT: A LEAP OF FAITH WE CAN'T AFFORD



ILL-ADVISED:
Lowering
taxes now will
only increase
the tax burden
on future
generations to
pay for
popular
retirement
benefits

Laura D'Andrea Tyson is dean of the Haas School of Business at the University of California at Berkeley and was President Clinton's chief economic adviser.

Another autumn—and it looks like another tax-cut confrontation between the Clinton Administration and the Republican Congress. The GOP majorities in both houses have passed sweeping proposals that the President has repeatedly promised to veto. The veto threat is understandable. What's surprising is that the Republicans are espousing a program that is highly dubious on political grounds and largely indefensible on policy grounds.

A massive tax cut that eats up future budget surpluses is ill-advised for several reasons. First, budget projections are inherently uncertain and subject to a wide range of error. It is true that both the Congress and the Administration have used eminently reasonable economic projections in their budget forecasts. But both have optimistically assumed that the unanticipated and largely unexplained surge in tax revenues during the past six years will be sustained in future years.

DOWNSIDE SURPRISE? John Kenneth Galbraith once quipped: There are only two kinds of economic forecasters—those who don't know and those who don't know they don't know. During the past several years, the economy's substantial surprises have been on the upside. What if the surprises are on the downside in the near future? Tax cuts promised today could easily produce ballooning deficits tomorrow. In just a few years, the elimination of the economy's structural budget deficit, arguably the major economic policy accomplishment of the 1990s, could fall victim to an unexpected tide of red ink.

Second, most of the projected budget surpluses outside of Social Security assume significant real cuts of 20% or more in discretionary federal spending. That means deep cuts in defense, law enforcement, and science and technology. Is it reasonable to believe that Congress will agree on such cuts in light of our educational shortcomings, scientific challenges, drug and crime prevention agenda, and defense commitments? Would such cuts serve the national interest? I don't think so. Nor am I alone. Polls indicate that most Americans are more concerned about crime, education, health care, and Social Security than they are about taxes.

Third, the Republican tax cuts would largely take effect just as the majority of Baby Boomers reach retirement. Would-be tax-cutters argue that future budgetary surpluses

belong to the American people. They may be right, but so do the future liabilities of Social Security and Medicare. These programs face long-term financing shortfalls despite the improved budgetary outlook over the next few years. Lowering taxes now will only increase the tax burden on future generations for these popular retirement benefits.

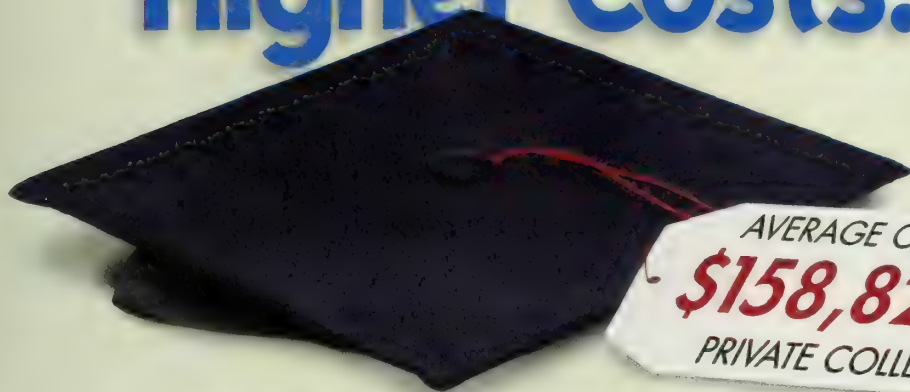
Both the Clinton Administration and congressional Republicans agree that the projected surpluses of the Social Security Trust Fund should be dedicated to ensuring its long-term solvency. But they disagree profoundly on what to do about Medicare. The President proposes to allocate 15% of the projected surpluses outside of Social Security to Medicare. Part of the money would be used to cover the cost of a new prescription drug benefit for Medicare beneficiaries. The remainder would extend the life of the Medicare Trust Fund for a quarter of a century.

Meanwhile, congressional Republicans content either to assume Medicare's financing gap will solve itself or postpone grappling with it until it reaches crisis proportions. But procrastination will only make solving the shortfall more painful in the future. Even without drug benefits, Medicare will need more revenues unless health care costs take an unlikely nosedive.

Finally, there is no economic justification for big permanent tax cuts. Temporary tax cuts could be justified to revive the economy were sinking into recession. But that's not the case. Or they might be justified as part of a major tax simplification/reform proposal as part of a concerted effort to reduce income inequality. But the Republican proposal does not simplify the tax code nor do they reduce the burden of payroll taxes on working Americans. And the majority of the beneficiaries of these proposals are targeted to families in the top 20% of the income distribution.

INCREASE SAVING. The American economy does not need more consumption. It needs more saving and investment. And the best way to increase saving is to use the surplus to reduce the national debt and thus reduce interest rates. Over time, saving the surplus will put more dollars into the pocketbooks of American families than cutting their tax bills. And dedicating a portion of this saving to Medicare will reduce the future burden on working Americans to provide for the health care of their elderly family members.

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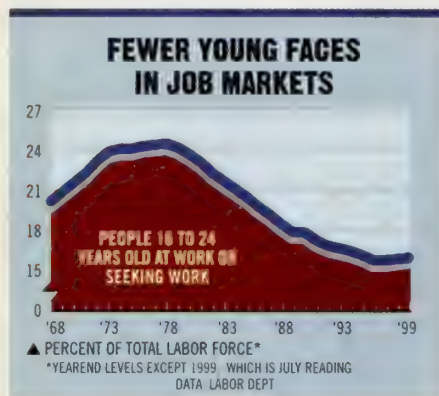
BY GENE KORETZ

THE HOT NEW U.S. LABOR MARKET

Why unemployment can stay low

Only a few years ago, the economic consensus was that the natural rate of unemployment—the level below which inflation was bound to accelerate—was somewhere around 6%. Yet joblessness has been 5% or less now for 29 straight months, and inflation has declined steadily through the 1990s, hitting a 12-year low last year.

What accounts for this amazing coincidence of modest joblessness and modest inflation? In a recent study published by the Brookings Institution,



economists Lawrence F. Katz of Harvard University and Alan B. Krueger of Princeton cite several developments that suggest unemployment, currently at 4.2%, can stay relatively low without sparking inflation and upsetting the economic apple cart.

The most obvious development is demographic—the aging of the labor force. Because young workers are inexperienced and uncertain about their job choices—spending more time looking for work and changing jobs more often than others—they suffer relatively high unemployment. Thus, both overall joblessness and the so-called natural unemployment rate tend to be relatively high when the proportion of youths in the labor force is large, and to fall when the proportion shrinks.

As it happens, the youth contingent has been shrinking in size for some time. Since hitting a peak of nearly 25% in the late 1970s, the labor-force share of people 16 to 24 years old has fallen to 16% in recent years (chart). The shift since the mid-1980s alone, according to the study, has lopped nearly half a

percentage point from the overall unemployment rate.

Another factor is the doubling of the adult population in prison since 1985—with 2.3% of the male labor force behind bars at last count. Assuming a fair number of these inmates would be counted as unemployed if they weren't locked up, Katz and Krueger figure that increased incarceration has lowered the jobless rate by around 0.17 of a percentage point since the mid-1980s.

More significant may be the growth of the temporary-help industry, whose share of employment has jumped from 0.5% in the early 1980s to over 2.2% today. Not only do many people who would otherwise be unemployed now work as temps as they look for permanent jobs, but the availability of temp agencies allows employers to fill vacancies more easily and, in some cases, to minimize wage pressures by keeping the new hires on temp payrolls. The two economists think such changes could have cut joblessness in the past 15 years by as much as four tenths of a percentage point.

Are such developments likely to lead to a high-employment economy in the years ahead? Katz and Krueger are hopeful. While incarceration policy could change, they point out that the shift toward an aging workforce that lowered unemployment in recent decades won't reverse over the next decade. And they think that the labor market improvements fostered by the temporary help industry are likely to endure.

GETTING A GED: WHO BENEFITS?

A study says only a few gain a lot

For years, educators have been urging high school dropouts to obtain General Educational Development certificates, or GEDs, by passing a high-school equivalency exam. However, despite the soaring number of dropouts acquiring geds (which are presumed to bolster job applicants' educational credentials), studies that have looked at the subsequent wages of dropouts who earned geds have found scant economic benefit.

The data indicate that those with GEDs earn slightly more on average than dropouts without them. But the gap is hardly significant, and those with GEDs continue to earn substantially less than regular high school graduates with similar backgrounds and academic skills.

Now, a new National Bureau of

Economic Research study by J. Murnane, John H. Tyler, and Willett reports that GEDs do pay off—but only for a select group of dropouts. The study compared the subsequent wages of young men who had dropped out of high school with their early performance on tests measuring core skills (reading, writing, math) when they were 10th graders.

The researchers found that higher-achieving dropouts tended to have higher earnings in their late 20s, regardless of whether they had acquired a GED. Those who had scored poorly and then obtained GEDs actually earned about 50% more than low-scoring dropouts without GEDs—bringing their earnings up to the level of high-scoring dropouts.

The bottom line is that acquiring a GED does appear to raise future earnings for dropouts who left high school with low academic skills. But it brings them up only to the level of other dropouts. Regardless of skill levels, most dropouts with GEDs still fare worse than peers who stayed in school.

RETAIL'S WAGE-PRICE SQUEEZE

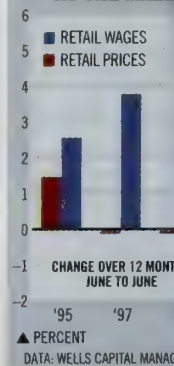
It's been offset by productivity

In recent years, the rise in retailers' hourly earnings has accelerated to a 4% annual clip while retail prices have actually been falling (chart). Have businesses survived?

The one-word answer, says James Paulsen of Wells Capital Management, is "productivity." As prices sagged in wake of the Asian crisis, he explains, consumer demand took off, causing unit retail sales growth to double. At the same time, he notes, growth of hours worked in retail trade actually decelerated significantly. As a result, productivity or retail unit sales volume per labor hour has risen by some 10% in the past two years—about as much as it did between 1984 and 1994.

Paulsen calls this the "New Era" retail economy. "Mild deflation sparks unit sales growth," he says, "as technology boosts worker productivity."

CROSSCURRENT AT THE MALL



MES C. COOPER & KATHLEEN MADIGAN

DON'T BET THE FARM ON RECENT JOBS DATA

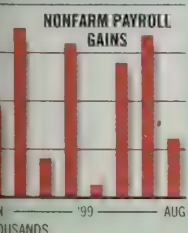
Wall Street may be reading too much into one month's numbers

U.S. ECONOMY

After a fusillade of stronger-than-expected economic reports on everything from home buying to car sales to payoffs by purchasing managers, Wall Street ran for the hills. The data firmly suggested that the Federal Reserve would have to push through a third interest-rate hike at its Oct. 5 meeting. Then came the softer-than-expected August employment report. Since the main focus is on tight labor markets, the future looked bright again, and investors felt easier about their bunkers.

From late August to right before the job-market report, the Dow Jones industrial average sank nearly 200 points and the 30-year Treasury-bond yield jumped 13%. But after the job numbers came out on Sept. 5, stocks and bonds rallied enthusiastically. The Dow rose 235 points, and bond yields fell back to just 6% on news that nonfarm payrolls increased by 124,000 last month, and that wages of production workers were up a tame 0.2% from July.

THIS YEAR'S UPS AND DOWNS IN JOB GROWTH



DATA: LABOR DEPT.

But is the August employment report really telling the story that the markets want to hear? Maybe not. The labor market story cannot be told in one month's data. Job growth has been volatile this year, and the August payroll gain followed a very large increase of 338,000 in July (chart). Over the past three months, job increases have averaged 248,000 per month, faster than the 215,000 pace averaged so far this year.

And while the gain in average hourly earnings was small, earnings had increased at faster rates in both June and July. So, over the past three months, hourly wages have been rising at a 3.7% pace, which suggests that after last year's slowdown, wages are picking up again.

MORE IMPORTANT, FEW OTHER INDICATORS

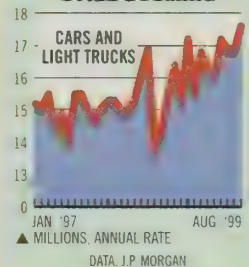
suggest that job growth is slowing down sufficiently to prevent the unemployment rate from drifting lower in coming months. In particular, first-time claims for jobless benefits have fallen below 300,000 per week for six weeks in a row, with the four-week average of claims down to a 26-year low. Any loosening in the job markets will show up first in the weekly jobless claims data, but

so far the numbers suggest only further tightening.

Another sign that the demand for labor is not easing is the acceleration in hours worked in July and August. Total worktime is on track to increase at an annual rate of more than 3% this quarter—three times faster than hours grew in the second quarter. Since hours worked are often a good proxy for overall economic growth, the pickup suggests that output growth is rebounding solidly from its second-quarter slowdown, when the economy grew at only a 1.8% annual rate.

Moreover, there are few signs that demand, especially by consumers, is cooling off. Sales of cars and light trucks in August hit a sizzling 17.6 million annual rate (chart). That's not only the highest of the year but the highest in this 8½ year expansion as well. Consumer spending this quarter appears to be growing between 3% and 4%. That's down from the phenomenal 5%-plus pace in recent quarters, but it's still a strong showing. And unless the trade deficit posts another steep drop, the speed of consumer spending usually sets the pace for the economy as a whole.

AUTO SALES ARE STILL BOOMING



DATA: J.P. MORGAN

THE STRONG DATA ON DEMAND

underscore anomalies that cropped up in the August jobs data, especially the large declines in both manufacturing and building payrolls. Construction jobs declined by a hefty 29,000, the fourth-largest drop in this expansion. But that decline came even as new-home sales in July jumped to their second-highest tally ever, and homebuilding promises to at least equal its record pace of 1998.

Of course, housing—and construction in general—is beginning to show signs that its two-year boom is topping out, slowed in part by rising mortgage rates. Construction spending fell 0.5% in July, a sign that this key sector may be a small drag on third-quarter growth. However, even with higher borrowing costs, tight job markets and wealth gains are still supporting home demand. So housing may plateau, but a sharp slowdown isn't in the cards. That means that some rebound in construction jobs is likely in September.

Likewise, the factory job data look dubious. Manufacturers said that they cut 63,000 workers last month,

after adding 51,000 in July, the first substantial gain in 1½ years. Also, the factory workweek fell by 12 minutes, to 41.7 hours. The August drops run counter to almost every other manufacturing indicator that shows factory activity is picking up after last year's lull caused by weakening exports, especially given that foreign demand is on the rise again.

One possible explanation is exaggerated seasonal adjustment: Factory orders jumped strongly—and broadly—in July, posting the largest increase of the year. Partly reflecting those thickening order books, there were fewer layoffs than usual in July, according to Labor Dept. officials, which boosted payrolls that month. But that resulted in fewer additions to payrolls in August, which made the numbers look weaker than they really were.

ON THE WAGE FRONT, more comprehensive measures of wages and benefits across a broader swath of the labor force show that overall labor costs are rising faster than the mild pace indicated by just the hourly earnings of production workers. In particular, the Labor Dept.'s revisions to second-quarter productivity and costs show that compensation, which covers more workers and includes various forms of pay such as stock options, is up 4.3% over the past year (chart).

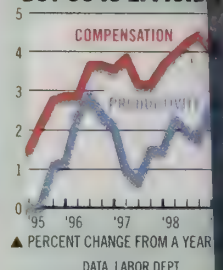
So far, productivity growth of 2.8% over the past year has been enough to offset much of that advance.

But since labor costs are unlikely to slow in a labor market where only 4.2% of the labor force is unemployed, productivity growth must continue to improve rapidly to prevent unit labor costs from speeding up.

Keep in mind that productivity growth slowed sharply to a 0.8% annual rate in the second quarter from the first, and unit labor costs soared at a 3.8% annual rate. And because the economy in the third quarter does not appear to be growing much faster than hours worked, another weak quarter for productivity growth appears to be unfolding. That could lead to a further gain in unit labor costs.

To be sure, the weaker-than-expected job report seems to have lowered the chances of another rate hike at the Fed's Oct. 5 policy meeting. That's especially true given the Fed's statement following its Aug. 24 rate hike, suggesting that it was willing to wait a while before raising rates again. However, without more concrete evidence that the economy is cooling off, and absent clearer signs that labor markets are loosening up sufficiently to ease wage pressures, Wall Street may feel under attack again before this year is over.

LABOR COSTS ARE RISING BUT SO IS EFFICIENCY



CANADA

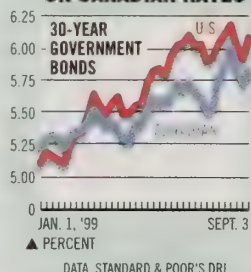
ALL EYES ARE ON THE FED'S NEXT MOVE

Can the Bank of Canada avoid following the Federal Reserve? That's the big question in the brightening outlook for the Canadian economy. So far, the BOC has sat back while the Fed has hiked U.S. rates twice since June 30. But with the rate differential growing, Canadian policymakers may have to move if the Fed hikes a third time.

The BOC's inaction reflects its desire for the economy to maintain its first-half momentum. Real gross domestic product grew at a 3.3% annual rate in the second quarter, following a 4.2% gain in the first quarter. Strong consumer spending and investment in Y2K-compliant computers powered the spring

advance. The vitality in domestic demand is evident in the latest data for retail sales, housing, and capital-spending plans, said the BOC in its August quarterly report. As a result, the bank expects the economy to grow at the upper end of its growth forecast of 2.75% to 3.75% in 1999.

THE UPWARD PRESSURE ON CANADIAN RATES



Meanwhile, inflation is at a low 1.8%, and last quarter's current account deficit totaled 5.25 billion Canadian dollars (\$3.5 billion), less than expected. A federal surplus means interest payments are down, and robust U.S. demand has boosted exports.

Lower rates have been a driver for domestic demand, but another Fed hike may force a BOC increase.

The U.S. federal funds rate is now at 5.25%, vs. the Canadian policy rate of 4.75%. And long-term U.S. rates are about a quarter-point above comparable Canadian yields (chart). The fear is that investors will sell off Canadian holdings for a bigger payoff in the U.S. That could lead to a downturn in the Canadian dollar.

So far, though, the Canadian dollar has been holding its own against the greenback. The "loonie" was trading at about 67¢ to the U.S. dollar in early September, up from 66¢ in late July. The strong Canadian economy has been one support for the loonie, as have rising prices for commodities produced in the western provinces. But doubts are arising about whether the loonie can withstand a third Fed hike without a similar move by the BOC.

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'THEY HAVE IT ALL NOW'

But can Redstone and Karmazin make the colossus work?

It all started over lunch at Viacom Inc.'s Times Square headquarters on Aug. 11. On one side of the table was Sumner M. Redstone, Viacom's bristly 76-year-old CEO. On the other was fast-talking Mel Karmazin, CEO of CBS Corp. The Federal Communications Commission had just struck down the rule barring one company from owning two television stations in one market—a move that instantly jacked up the valuations of TV stations and may well have changed the dynamics of broadcasting. The meeting of the two CEOs was about how Viacom and CBS might swap some stations to take advantage of the new rule. But one meeting led to another, and soon, Karmazin upped the ante, proposing that CBS buy Viacom. Redstone said no. O.K., said Karmazin, Viacom can buy CBS.

So began the biggest media deal in history. After several more meetings, at Viacom and later, at Karmazin's apartment, where the men huddled to avoid prying eyes, the moguls and their minions worked out the details. On Sept. 7, Viacom agreed to pay \$37 billion in stock to combine the two companies

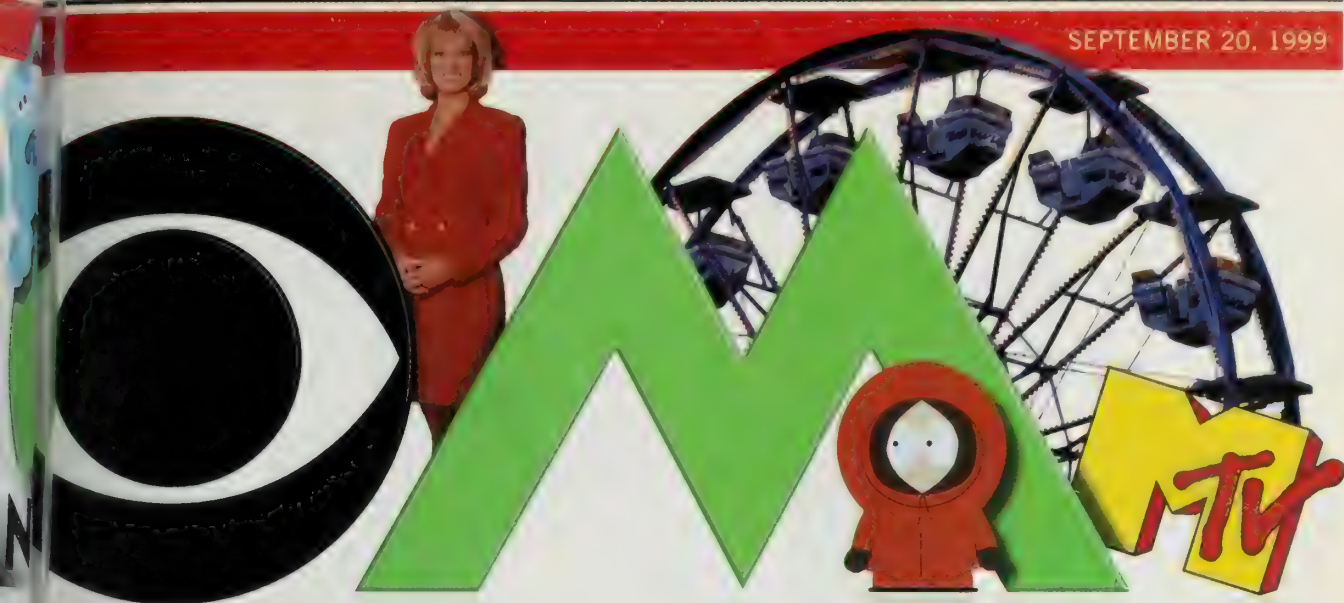
into a new megamedia empire capable of taking on the likes of Time Warner, Walt Disney, and News Corp. Keeping the Viacom name, it will encompass a major TV network, a Hollywood studio, top cable channels, including MTV, Nickelodeon, and The Nashville Network, TV stations, and Infinity Broadcasting, the biggest radio-station and outdoor-advertising group in the U.S. Add to that King World Productions (the game and talk-show producer CBS has agreed to acquire) and Viacom's theme parks, movie theaters, and publisher Simon & Schuster.

CRADLE TO GRAVE. In total, it will be a \$21 billion-a-year beast producing \$4 billion in earnings before interest, tax, depreciation, and amortization. Despite its wide swath, some two-thirds of the new giant's cash flow will come from cable channels and radio stations after Viacom completes its previously announced spin-off of the Blockbuster video-store chain. That's all right with Wall Street—because cable channels and radio are among the fastest-growing sectors of the media world. And, perhaps most important, in an era of constantly splintering media outlets with

narrowly focused demographics, the merger establishes Viacom as a cradle-to-grave advertising depot, stretching from cable channels for toddlers, such as Noggin, to MTV and VH1 to CBS' gray (and in Madison Avenue's view, undesirable) audience to a planned cable channel for seniors. "They have it all now," says Merrill Lynch & Co. media analyst Jessica Reif Cohen. "They're on the same playing field with Time Warner, News Corp., and Disney."

But as Disney has learned since absorbing ABC in 1995, blending a network with a studio does not guarantee overnight synergistic success. The new Viacom's challenge is to push the mantra that Karmazin has pursued at CBS: a dogged cross-selling and cross-promotion strategy involving multiple media properties in hundreds of local markets while exercising strict cost controls back at headquarters.

The most intriguing twist in this tale is how Karmazin ended up the uncrowned king of the new Viacom deal. When the deal closes in mid-2000, Philippe P. Dauman and Thomas H. Dooley—top Viacom execs, both in their early 40s, and Redstone's closest advisers



will leave the company with several packages worth more than \$150 million each. While Redstone will retain titles of chairman and CEO, the 67-year-old Karmazin, as president and operating officer, will effectively be running the show.

As part of his employment contract, which runs through 2003, Karmazin will retain many of the powers that a CEO usually enjoys—such as having all decisions report to him. The contract also states that if Redstone ceases to be CEO during Karmazin's term, Karmazin automatically takes the mantle. One might be inclined to ask: How did that happen? "A lot of this is instinct," Red-

stone told BUSINESS WEEK. "He and I are so alike—we're both entrepreneurs."

The deal has a certain sense of familiarity. In 1995, Karmazin sold the radio group he built, Infinity Broadcasting, to Westinghouse Electric, CBS's parent. Karmazin eventually persuaded Michael H. Jordan to let him run both the radio and TV operations, what became CBS after the spin-off of old Westinghouse assets. Belonging, Karmazin was in charge—and Jordan took early retirement. Of course, the difference in time is that Redstone remains the controlling shareholder—and that counts for a lot.

Certainly, Karmazin is also the closest thing to a media Midas that Wall Street has at the moment: CBS's stock has tripled since he joined the company. Karmazin has built a loyal following among investors by consistently delivering on expected growth and earnings.

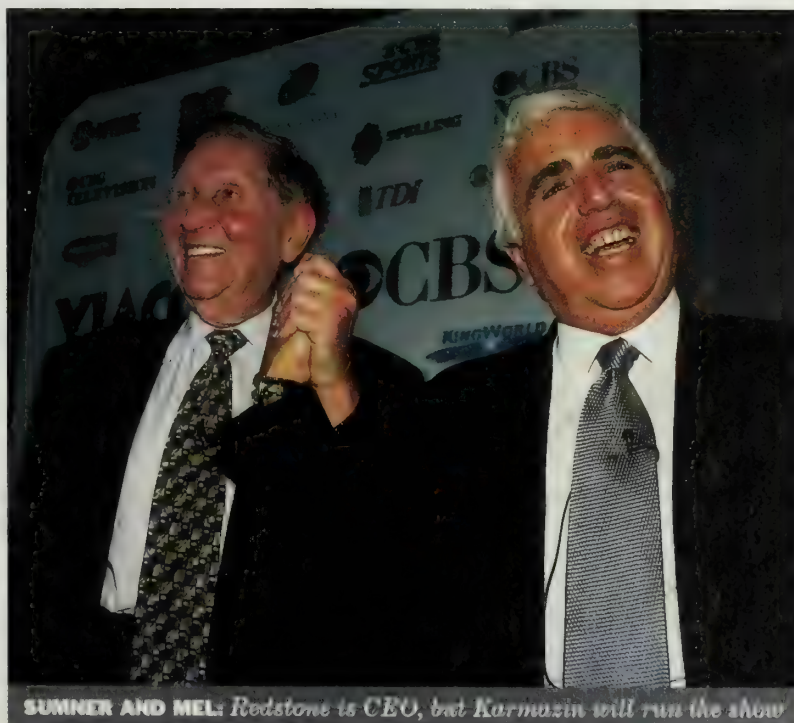
AD-DEPENDENT. Karmazin, a cab driver's son who grew up in a Long Island City apartment project, is a master salesman who cut his teeth hustling radio ads in New York in the 1960s and 1970s. His sales acumen will be put to the test at Viacom: Roughly half of its revenues will be derived from advertising, making Viacom's income extremely sensitive to the ebbs and flows

of the economy. By comparison, Walt Disney and Time Warner each generate less than a quarter of their revenues from advertising.

Karmazin has blithely predicted before that he can cajole his sales forces into 10% top-line growth annually no matter what. Add to that his obsession with excess overhead and disdain for corporate perks, and one quickly sees why analysts are pumped about his taking the reins at Viacom. Merrill's Cohen thinks Karmazin can wring some \$300 million out of the combined companies.

Merging the two companies also presents the opportunity to meld the broad collection of Internet businesses CBS has taken stakes in—mainly in exchange for on-air promotion—with Viacom's Web efforts. Music, in particular, could be a big opportunity: Already, MTV.com is the most visited music site on the Web, and CBS has been working on plans to bring content from its 80%-owned Infinity Broadcasting Corp.'s 160 radio stations online.

But Karmazin's biggest test is going to be whether he can really build a cross-selling platform that offers advertisers a one-stop shop of media in any demographic and in any market. So far, Karmazin's cross-selling efforts at CBS have received mixed reviews from Madison Ave., though others, in-



SUMNER AND MEL: Redstone is CEO, but Karmazin will run the show

Viacom's healthy balance sheet will allow Karmazin to keep shopping guilt-free for media properties

cluding News Corp., have pursued similar strategies. "When it comes down to it, it's very difficult or almost impossible to execute," says Aaron Cohen, executive vice-president at Horizon Media Inc., which places \$475 million worth of advertising every year.

Meanwhile, with Viacom's healthy balance sheet—capable of borrowing \$20 billion—Karmazin can keep shopping guilt-free. Analysts say likely follow-up buys could include the TV stations owned by Chris-Craft—Viacom's partner in United Paramount Network—or the station group owned by Tribune Co.

Meanwhile, the Viacom-CBS deal will certainly encourage other couplings—especially those that take advantage of the new FCC rules. NBC has previously talked with Sony Corp. about combining their entertainment assets and is currently in talks with Paxson Communications Inc. about an investment that would give NBC access to its 73 UHF TV stations. Also high on the deal mill is Barry Diller's USA Networks Inc., which has 13 UHF stations to its name and has been talking with Disney's ABC. And hot again in the wake of the CBS deal are radio giants AMFM Inc. and Clear Channel Communications Inc.

Certainly, Karmazin and Redstone are two moguls who usually get what they go after. A former lawyer, Red-

stone operated a low-profile theater chain before deciding he wanted to vie with media giants such as Rupert Murdoch by buying Viacom 12 years ago. And Karmazin has proven yet again his acumen at selling a deal—and himself. Redstone clearly likes his style and says he asked Karmazin to come with CBS. Although Redstone and Karmazin say Karmazin never insisted on being made successor, another person familiar with the deal says it "would never have happened" otherwise.

ENTRENCHED. Certainly, the documents suggest that. Although he must consult with Redstone on all major decisions, it would take 14 directors from a board that consists of 10 Viacom appointees and eight from CBS to change any of Karmazin's responsibilities.

In any case, Karmazin's arrival means that the long-watched succession race between Deputy Chairmen Dooley and Dauman is suddenly over. Redstone says he gave his deputies veto power over the deal and "begged them to stay." They declined but opted instead to stay on the Viacom board. Dauman remains the trustee of Redstone's estate and in the event of Redstone's death would become Viacom's chairman.

Redstone and Karmazin were all smiles and accolades at the announcement. "You can print this if you want

to," says Karmazin, "but the deal was about getting a ticket to the Music Awards." Redstone, meanwhile, has allayed investor concerns about the future of a company where a senior chairman has never identified a clear successor. "In my experience, no one has always loved the deal more than I, running the company, and in my opinion, he has a first-class operation," says ex-Viacom CEO Frank J. Biondi, whom Redstone fired in '95.

That said, Biondi's demise, as well as the departures of Dooley and Dauman, suggest that nothing is certain about Redstone. In financial terms, both Redstone and Karmazin have identical employment contracts: \$1 million salary and up to \$10 million in bonus next year, plus options for 2 million shares issued at the share price when the deal closes. But Karmazin's contract has extra provisions, such as one barring him from working on "books, articles, etc." about Viacom during the employment term. This is ironic since Karmazin once insisted on similar contracts for radio stars Howard Stern and Don Imus that barred them from mentioning him on the air. It's also true that Redstone, though he jokes he was "seduced" by Karmazin, hasn't surrendered entirely.

By Richard Siklos in New York

Walt Disney



EISNER

1998 REVENUES
\$22.9 billion

STRENGTHS Exceptionally strong brand names; potent cross-promotion among well-diversified properties; popular cable networks, including ESPN and the Disney Channel

WEAKNESSES Lackluster overall growth; ABC Network's poor showing

News Corp.



MURDOCH

1998 REVENUES
\$13.6 billion

STRENGTHS Fox Network's young, hip image; successful cross-promotion among well-diversified businesses, including sports networks; distribution via satellite

WEAKNESSES Heavily invested in yet-to-be-profitable startups

Viacom/CBS



REDSTONE & KARMAZIN

1998 REVENUES
\$18.9 billion (if merged)

STRENGTHS Popular cable networks, including MTV and Nickelodeon; strong cash flow from radio; merger provides potential for cross-promotion across a variety of media

WEAKNESSES Dependent on advertising revenues; CBS's older demographics

Time Warner



LEVIN

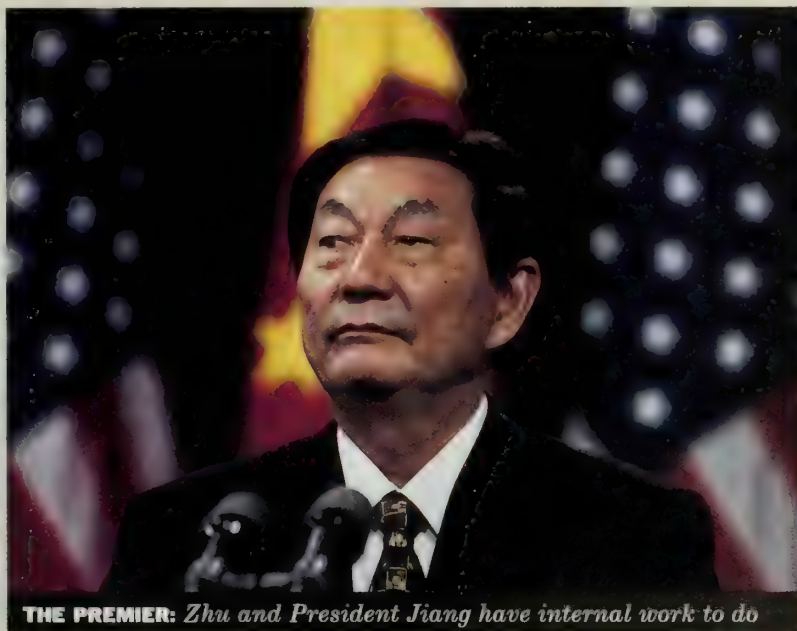
1998 REVENUES
\$26.8 billion

STRENGTHS Cable system and popular cable networks, including CNN and Home Box Office; TV production; film subsidiary New Line Cinema

WEAKNESSES No TV stations; not big in lucrative local advertising market

By Paul Magnusson

CHINA AND THE WTO: DON'T RUSH TO MAKE A BAD DEAL



THE PREMIER: Zhu and President Jiang have internal work to do

When Chinese Premier Zhu Rongji returned to Beijing empty-handed from his state visit to Washington in April, he looked as if China's dream of entry to the World Trade Organization was dead for this year. Since then, prospects have grown worse. Beijing's leaders are furious with a congressional report accusing China of dealing U.S. nuclear secrets—and broke WTO talks after U.S. planes accidentally bombed its embassy in Belgrade.

Yet pressure to reach a deal is mounting again on both sides. President Clinton and Chinese President Jiang Zemin are expected to announce resumption of the talks when the two leaders meet on Sept. 11 in New Zealand. And there are good reasons for both sides to compromise: China wants to join the 134-member group before the Nov. 30 summit meeting so it can be in on the next round of global trade talks. And the Clinton Administration wants to wring more market-opening concessions for U.S. exporters before the 2000 elections make China's WTO bid a campaign issue.

The problem: In the four months since negotiations broke off, there has been no progress on any of the issues that kept the Clinton Administration from sealing a deal in April. On some issues, the U.S. and China may be further apart. Beijing insists it never agreed to a long list of mini-deals that was released in April on the White House Web site. Meanwhile, internal

disputes among leaders in Beijing may make compromise more difficult.

Even as they reopen talks, U.S. officials insist they won't rush into an incomplete deal. China still must move toward the free-trade rules that other WTO members already observe. So the details of this agreement and the pace of China's promised market reforms will be crucial. Both sides agree that these important issues must still be settled:

■ **DUMPING.** China and the U.S. remain at odds over how WTO members would calculate dumping penalties on Chinese goods exported at prices below the cost of production. That's because no one agrees on how to determine such costs in a state-owned or directed economy. U.S. trade negotiators insist on tangible measurements.

■ **IMPORT SURGES.** The U.S. wants Chinese assurances that it won't object if Washington levies temporary tariffs and quotas to protect some U.S. industries, notably textiles and clothing. The U.S. has agreed to end its global clothing quotas

by 2005 but wants to retain the option to impose new limits on Chinese apparel. China appears willing but reasonably wants to phase out the protections.

■ **MARKET ACCESS.** China is resisting lowering barriers to foreign majority ownership in retail banking, securities trading, and telecommunications. Beijing is also fighting unfettered access to the Chinese market for U.S. films and the Internet. But if Beijing doesn't make such key concessions, it can't be a full-

fledged member of the WTO.

Zhu and Jiang face tough opposition at home to such concessions. Since Beijing's huge bureaucracy is intimately connected with industry, "most government departments don't want China to join the WTO," says a Chinese economist in Beijing. Information Minister Wu Jichuan threatened to resign over Zhu's April offer to allow 50% foreign ownership in telecom companies. National People's Congress head Li Peng is among the conservatives resisting reforms.

It may be tempting for the Administration to rubber-stamp China's WTO nomination as a gift to China's reformers and hope that resulting disputes will be ironed out by the WTO later. But that clearly won't work: The fledgling WTO has so far proved too weak to adjudicate relatively minor disputes between the U.S. and Europe—two market-based economies with similar cultures.

A deal to get China into the WTO and a successful new round of global trade talks in November are top goals for Clinton. And access to 1.2 billion Chinese consumers could be important for U.S. economic growth in the next century. But the price of a bad deal is too high to pay.

Magnusson covers trade issues from Washington.

NO PROGRESS Not only has Beijing not made any real concessions, it insists it never agreed to the tiny ones the White House announced

Q & A

THE FED'S LONE STAR LONER

A talk with rate-hike dissenter Robert McTeer

When the Federal Reserve Board raised interest rates on June 30, Dallas Fed President and Chief Executive Robert D. McTeer Jr. cast the lone dissenting vote. And it appears he may have disagreed with the Fed's Aug. 24 hike, too. McTeer, who joined the Federal Reserve in 1968 after receiving his PhD in economics from the University of Georgia, became president of the Federal Reserve Bank of Dallas in 1991, having previously worked for the Fed in Richmond and Baltimore. McTeer's dissent stems from his conviction that improved productivity will allow for faster, non-inflationary growth. On Sept. 1, he explained to *BUSINESS WEEK* Fed watcher Laura Cohn his views on the New Economy and elaborated on his economic outlook.

Q: Why did you dissent on June 30?

A: It really didn't take a lot of personal courage because Alan Greenspan rarely beheads anybody. My position on some of the New Economy issues probably was the strongest in the group. So I'd be the logical one to go over that line.

Q: Why are you upbeat on productivity?

A: Behind my optimism is the last 3½ years. We've had fairly rapid growth that has been supported both by faster-than-normal [growth in the number of] hours worked and by faster-than-normal productivity [growth].

We had a disappointment in the second quarter, but I'm hopeful that that was an aberration and not an indicator of a trend. I believe we're going through a very important technology revolution.

Q: Why does the Dallas Fed hold this view, while others don't?

A: It's happening all over the economy, but a bit more in our region. We've got a telecom corridor in north Dallas. It's a two-mile concentration of over 600 high-tech companies. And Austin is a hotbed of not only Dell Computer

“ It really didn't take a lot of personal courage because Alan Greenspan rarely beheads anybody. My position on some of the New Economy issues probably was the strongest in the group. So I'd be the logical one to go over that line. ”

manufacturing but of software innovation. I believe the environment in Texas is more entrepreneurial. And certainly, growth in Texas has exceeded the national average every year since I've lived here. It's a vibrant, hot economy.

Q: How long can the U.S. grow at a 3%-plus rate without sparking higher prices?

A: I don't see anything that's going to cause a downturn. You could argue that our personal savings rate is too low. You could argue that our trade deficit

is too large. You could argue we're relying too much on foreign capital. But those are not things that are likely to slow the economy very much.

Q: Why not?

A: While our personal savings rate has gone down, that's been partially offset by the government savings rate going to a small positive. So national savings hasn't gone down nearly as much as personal savings.

Q: Do you worry about our status as a debtor nation?

A: I don't worry a lot about it. I worry who worry assume that we're borrowing more goods abroad than we're selling.



abroad and that we're having to finance that with capital inflow. It's just likely that the causation is working the other way and it's the capital inflow that's causing us to have the trade deficit.

Until recently, our dollar has been very strong. The recent weakness in the dollar is a bit troublesome, but people exaggerate that because it's concentrated primarily in the yen. I don't think looking at all our trading relationships the dollar has weakened that much.

How is your thinking about the economy colored by what's happened in Mexico?

Mexico is four times as important to the Texas economy as it is to the rest of the U.S. Mexico has been fairly well lately. The Mexicans' economy and output are growing. During the period of very low oil prices, they were hurting. So much of their government revenue depends on exports. This rebound in oil prices has helped them a lot. So I think Mexico is only a slight source of strength now.

Q: Months ago, you said deflation abroad will damp U.S. prices. What about now?

A: It does appear that the Asian countries have bottomed out. And that does shift things just a little bit. We're no longer importing those deflationary forces. But on the other hand, we're not importing inflationary forces either.

Q: What else is reassuring to you?

A: We are very close to price stability. In the 1970s, if a company wanted to pass along higher costs as higher

prices, they just did it because they knew all their competitors would too. But in this stable price environment, they can't do that. So they have to try harder to cut costs and become more efficient.

Q: What's your view on the role of the stock market in monetary policy?

A: I do not think it's appropriate for the Fed to set out to influence stock prices. Whether we think it's irrationally high or not, we really have to trust the collective judgment of stock buyers and sellers.

NEW MATH FOR THE NEW ECONOMY

For the past few years, government statisticians have felt like greyhounds chasing a mechanical rabbit. No matter how often they release and update data, they can never catch up with the economy's pace of change. The effects of the Information Revolution in particular have proved hard to pin down.

But now the Bureau of Economic Analysis is about to make another stab at capturing the New Economy in government data. Starting in late October, the Commerce Dept. will finally acknowledge that business spending on software is an investment, just like spending on computers and communications gear. That means, for the first time, business software will be counted as part of gross domestic product. We will now recognize that software has a long purchase life," says Brent R. Moulton, top economist at the BEA.

This single change will have an enormous impact on growth, investment, productivity, and inflation. The BEA will not release its estimates until Oct. 28, but it has described its methodology.

Based on that, BUSINESS WEEK estimates that software will likely add 0.15 to 0.3 percentage points to annual GDP growth over the last three years—a significant increase.

GROWTH JUMP. Because the BEA will recalculate GDP for earlier years as well, growth rates will be raised as far back as 1959. But the changes will likely be bigger in recent years. "Because software use has accelerated recently, you have to assume the

'90s will have higher growth rates relative to the '80s," says Michael R. Englund, chief economist at Standard & Poor's MMS. "It's a repeat of the New Economy claims."

And since growth will be higher than previously estimated, productivity will likely be revised up as well,

ment in information technology by a full third. "This goes a long way toward explaining the exemplary performance of the U.S. economy in recent years," says Reaser.

Moreover, the BEA will calculate a price index for both prepackaged and custom software. The exact figures

won't be known until the October release date, but the BEA's discussion makes it clear that the new data will show software prices falling, perhaps by 5% or more annually. That will pull down the inflation rate by some amount.

The BEA will make other changes to the data in October, besides introducing software into GDP. A better handling of government employee retirement plans will have the effect of increasing personal savings. And improvements in tracking the financial sector could affect growth as well.

Moreover, the BEA will likely adjust the data to eliminate part of the statistical discrepancy between GDP and gross domestic income. In theory, these measures should be equal. But

over the last three years, the discrepancy has built up to 1.4% of GDP, close to the largest on record. If the October revision eliminates half that, the growth rate for the last three years will bump up 0.2 percentage points more. This still may not describe the full effect of the Internet boom, but it's a lot closer than the figures we had before.

By Michael J. Mandel in New York and Laura Cohn in Washington

HOW THE NUMBERS WILL CHANGE



SOFTWARE For years, the Bureau of Economic Analysis has undercounted the value of software by treating it as a raw material to be used in the production of other goods and services.

Now, it will treat software as a business investment, which will add to the GDP.



PRODUCTIVITY Economists have long suspected that the way the government measures productivity in the service sector does not truly reflect improvements there. Now, the BEA will try to account for labor-saving innovations such as ATMs and electronic transfers in banking.



SAVINGS In a move that could result in a higher estimate of the U.S. personal-savings rate—now in negative territory—the BEA will start to treat government pensions like private ones and count them in household savings.

notes Lynn Reaser, chief economist at Bank of America Private Bank in Jacksonville, Fla. In addition, capital spending will go up from its already high levels. In the second quarter of 1999, for example, capital spending per employee in the private sector was running at an annual rate of nearly \$8,000, about half of which was spent on information technology, Reaser says. The new revisions could boost measured private-sector invest-

WASHINGTON

A RUSH TO THE HEAD OF THE CLASS

Presidential rivals strain for an edge on education

It's that time of year again, when 53 million kids return to school and Presidential candidates trip over each other to seize the public's imagination on education issues.

Out to prove that he's even more committed to kids than his boss, Vice-President Al Gore is backing an expansion of experimental "charter" schools, universal pre-kindergarten, and more federal money for school construction, teachers, and technology. Texas Governor George W. Bush

wants. It's clear that improving public schools is a top priority both for parents and for business leaders. But when it comes to doing that, politicians need an

advanced-placement course in opinion polling to craft a safe platform.

Parents, for example, appear to be genuinely conflicted. They support the egalitarian concept of public education and are leery of funneling tax money to religious schools. Yet they are deeply concerned about whether the public system and its suffocating bureaucracy can be reformed.

With President Clinton and the Republican Congress engaged in continual bickering over school policy, parents and business groups are running out of patience. "Anything that can stimulate needed change should be considered," says State Farm Mutual Automobile Insurance Co. CEO Edward B. Rust Jr., who chairs the Business Roundtable's education

task force. "I don't think anybody out there is doing a good enough job educating kids for the world they are going to see."

The problem will only grow larger in coming years. The number of school kids in the U.S. is at an all-time high, eclips-

ing the mark set at the peak of the baby boom. Suburban schools are bursting at the seams; inner-city schools are decaying; school districts are facing a severe teacher shortage. No wonder 62% of Americans surveyed this summer

backed a centrist Democratic Leader

Council said there is "a crisis in public education."

Most of the parents say they want the right to choose their child's school. Charter schools—public schools run by private corporations, private foundations, or private educators and exempt from many bureaucratic rules—were endorsed by 63% of adults. But they also support voucher programs that use tax dollars

to send students to private or religious schools. Some 54% of adults—including a majority of Democrats—favor vouchers "to promote equal opportunity." Vouchers are particularly popular among working-class Catholics and African Americans. Smelling a winner, Republicans have seized on vouchers as their preferred fix.

But the GOP could push too hard. Americans don't want vouchers to gut public education. Given a choice between improving public schools and providing vouchers, just 28% of Americans would pick vouchers, says a Gallup Poll released Aug. 25. Vouchers also face the church-state hurdle. Legal scholars expect the U.S. Supreme Court to decide the matter in the next two years.

There is also no conclusive

ELECTION 2000
THE ISSUES

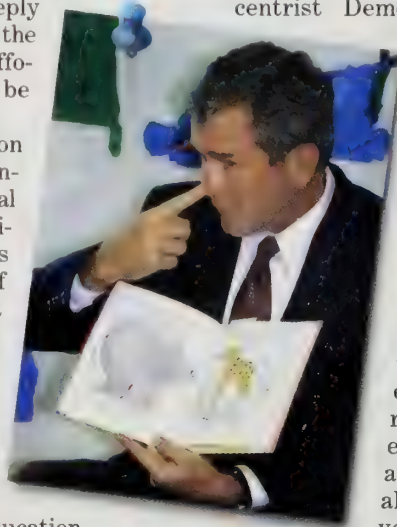


education

vouchers, wants to mandate state standards, and would give the federal Education Dept. jurisdiction over the Head Start program. Democrat Bill Bradley is calling for better teacher training and national standards. Republican candidate Steve Forbes would send federal education dollars back to the states in the form of block grants and let local officials decide how to spend them. "Everybody running for office, from President to dogcatcher, has a position on education," scoffs one business lobbyist.

One reason for the multiple agendas is the confusion over what the voters

SCHOOL DAYS: (Clockwise from top right) Bill Bradley, George W. Bush, Steve Forbes, and Al Gore



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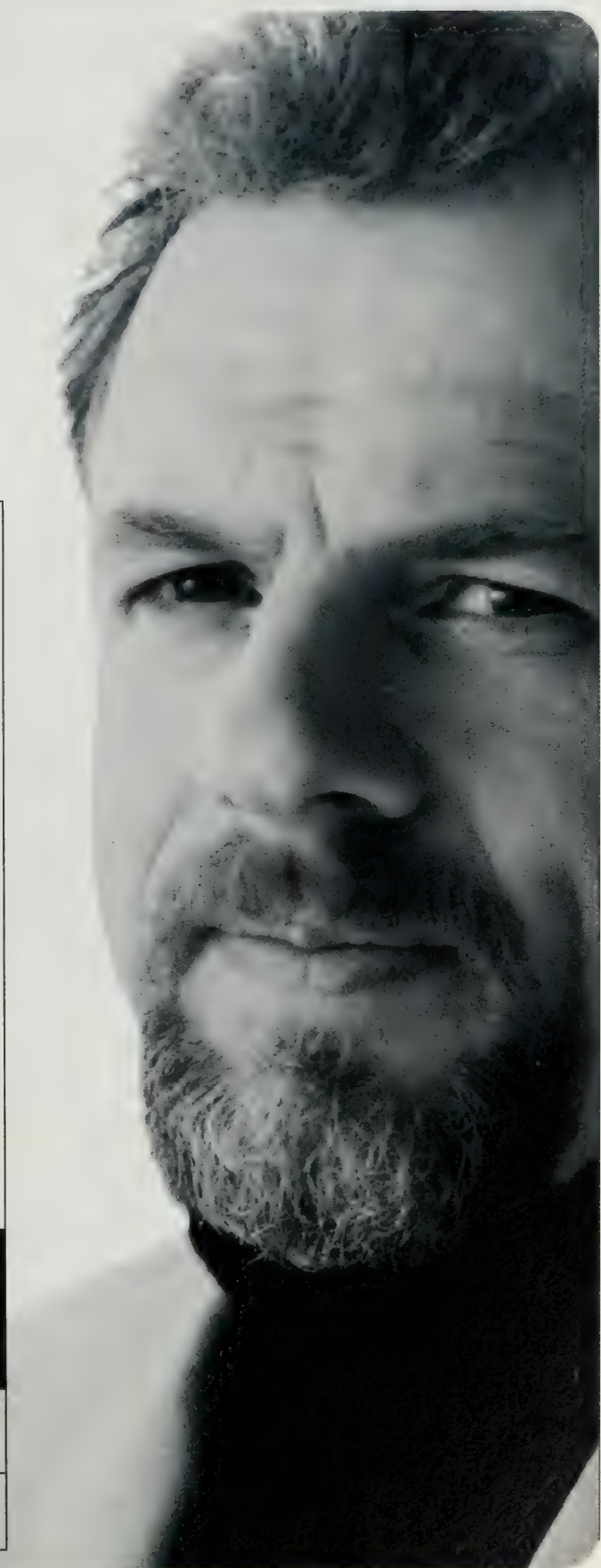
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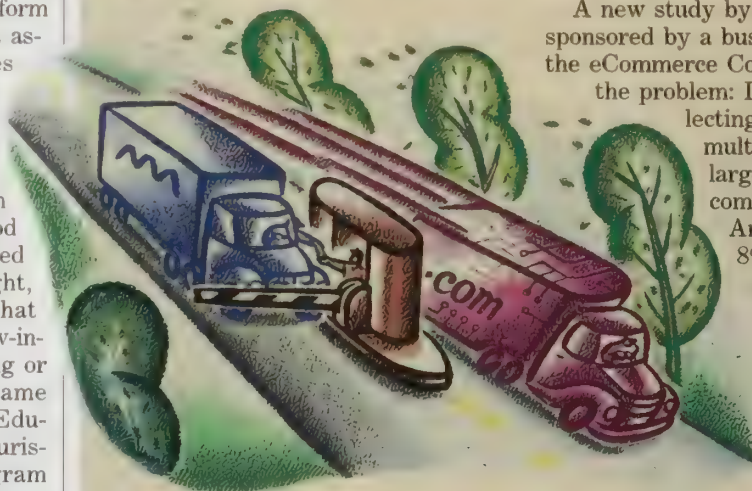
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COMMENTARY

By Howard Gleckman

A FIRST STEP TO NET TAXES

With only eight months before it must present its recommendations to Congress, the national commission on Internet taxation seems to be sputtering like a Web site with a bad server. The commission can't bridge the gap between conservatives who want to keep the Net tax-free, state and local governments that covet its revenue potential, and E-businesses that are willing to collect taxes—as long as it's made easy for them.



The panel's next session is set for Sept. 14-15 in New York. Even its chairman, Virginia Governor James S. Gilmore III, isn't sure the group will ever agree on whether Net transactions should be taxed at all. "I can't assure you of consensus," he told *BUSINESS WEEK*. "It may be that making the case for each side and presenting it to Congress is success."

Translation: Gridlock ahead. But the attempt to wrestle the tax issue to the ground is yielding one development. Most commission members agree it's important to simplify state and local sales taxes. Cleaning up those laws could make it possible for states to require out-of-state sellers to collect the levies. It would make life easier for remote sellers, including both mail order companies and online businesses. And it might even pave the way for a deal on the overall question of taxing the Net.

Today, states can't require remote sellers to collect tax because, in 1992,

the Supreme Court ruled those duties were too onerous. Why, the court said, should a business in Delaware have to keep track of a cane tax rules in, say, North Dakota? **MARSHMALLOWS.** The court asked Congress to fix the problem. That never happened. Instead, the rules have gotten even more complex. For instance, in New York, big marshmallows are taxable, but little ones are not. Why? Big ones are considered candy, but little ones are food.

A new study by Ernst & Young, sponsored by a business group called the eCommerce Coalition, highlights the problem: It reports that collecting sales taxes in multiple states costs large remote sellers and companies such as Amazon.com Inc. 8% to 14% of the amount of tax they collect.

Small retailers may pay nearly as much in administrative costs as the do in taxes. Governors

have already agreed, in principle, that each state should impose a single tax rate for E-commerce, rather than permitting cities and counties to set their own rates. By late September, the National Governors' Assn. hopes to draft a model state law intended to trim much of the complexity from the current patchwork system, including common reporting standards. Technology may also make the task easier. New software enables sellers to determine instantly where a buyer lives, whether a product is taxable, and what the rate is.

But there is a trade-off. If governors and mayors do simplify their laws, a major objection that E-sellers have to the levies will evaporate. They have said that all they want is fair and equal treatment under state tax laws. Simplification would go a long way towards giving it to them.

Gleckman covers tax policy from Washington.

idence that voucher schools would be a major improvement. Pilot projects involving vouchers in Cleveland, Milwaukee, and Florida have yielded mixed results—although Kenneth Metcalf, an Indiana University education professor studying the Cleveland experience, reports "small but significant improvement" in the language arts skills of voucher students. Business leaders are divided over the issue, but some are willing to experiment. "There are risks to public funding of private education," says William T. Solomon, CEO of Austin Industries Inc., a Dallas-based construction company. "But I think those risks are worth incurring, at least on a trial basis, because what we have is not working."

DANGEROUS TASK. For Republican candidates, fine-tuning an education-reform pitch is a balancing act. They must assuage the powerful conservatives who would be happy with no federal involvement in schools. But they also must find votes among non-ideological parents who just want their children to get enough skills to go to college or get a good job. In a Sept. 2 speech, Bush tried to please both sides: For the right, he promised to punish schools that don't measure up and give their low-income students vouchers for tutoring or private-school tuition. At the same time, he proposed expanding the Education Dept.'s role by giving it jurisdiction over Head Start, a program that conservatives loathe.

For this compromise, Bush has drawn heavy fire from the Republican Party's right wing. Former Reagan domestic policy adviser Gary Bauer, a rival for the White House, dismissed the Texas governor's plan as "Gore Light." Voters don't mind, however: A mid-July Fox News/Opinion Dynamics Poll found Bush and Gore dead even on the issue. Bush tied Gore among those earning under \$25,000 a year. And his policies were preferred by voters in the Midwest, a key battleground.

Meanwhile, polls still show Democrats firmly ahead on education issues. Their supporters include teachers' unions, which are suspicious of the various GOP proposals. American Federation of Teachers President Sandra Feldman says she's glad the Republicans now identify education reform as a key issue. "Right now, there is a substantive discussion going on," she says, "and I consider that a victory." Finally, business and labor can agree on something.

By Richard S. Dunham in Washington, with bureau reports

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COMPUTERS

THE BIG SQUEEZE IN THE PC MARKET

Only the giants and the mom-and-pops may survive

When the market for sub-\$1,000 personal computers took off a couple of years back, scores of small companies saw their chance: With the top brands focused on more profitable machines, they had an open field. Now, it's closing in. Other than phenomenon eMachines Inc., the top names in cheap PCs are the top names in PCs: Compaq, Hewlett-Packard, IBM. "As the top brands press down, the guys at the bottom get squeezed to death," says Chuck Cebuhar, general manager of Sears, Roebuck & Co.'s home electronics unit.

Already, Packard Bell is scaling back and free-PC upstart Microworkz.com faces an uncertain future. The market share for PC makers outside the top five has slid from 47% of the U.S. market in 1997 to a projected 26% in 2000, according to Ziff-Davis InfoBeads.

PRICES PLUNGE. This year, suppliers such as Compaq and HP have been attacking the bottom end of the market full force. They're selling PCs for as little as \$499—and that's not including the \$400 rebates given to customers to agree to sign up with selected Internet service providers. The average price of a home PC has plummeted 48%, to \$843, since mid-1997, says ZD InfoBeads. So sub-\$1,000 PCs now represent 75% of the market. Now, retailers report, shoppers are using those rebates to buy top brand PCs, not to take home no-names for no money down.

The big guys can afford to play and win at the low end because of falling



Big Names vs. No-names

More and more, big national brands such as IBM, Dell, Hewlett-Packard, and Compaq rule. "Others" are getting squeezed.

	1996	1997	1998	1999
TOP 3 DIRECT PC MAKERS	18.6%	21.8%	27.5%	34.5%
TOP 3 INDIRECT PC MAKERS	26.9	30.4	33.0	35.0
OTHERS*	54.6	47.8	39.5	30.5

*Includes Apple and eMachines

DATA: ZD INFOBEADS INSIDER

component prices—particularly Intel Corp.'s aggressive cuts on its Pentium microprocessors. PC makers also have cut costs, outsourcing almost all PC production and paring inventory costs with just-in-time deliveries to dealers.

There are still a few niches where the little guys can eke out a living. Local computer stores that crank out no-name "white boxes" will maintain roughly 33% of the overall market, say analysts. These mom-and-pop outlets do a better job than the national

SHOPPERS: Picking top brands

brands when it comes to offering handhold small businesses.

But the lack of middle ground makes it next to impossible for entrepreneurs trying to create the next great company. Analysts at the plans of Packard Bell founder Alagem to resuscitate

near-dead AST Research Inc. And despite the fastest launch in U.S. corporate history, eMachines still has far to go. In a recently released public filing, eMachines disclosed that it had lost \$3.9 million in the first half of the year. "You have to be very, very large or very, very small," says Matt Sargent, an analyst with ZD InfoBeads. Staying out territory someplace else does seem to be an option.

By Peter Burroughs
San Mateo, Calif.

THE SOUL OF AN OLD MACHINE

The last Amiga rolled off the assembly line in 1994. But the pioneering multimedia PC still commands the loyalty of several hundred thousand devotees around the world. Gateway Inc., which now owns Amiga, last year promised to resurrect the old Commodore computer by

Christmas. "The new Amiga will take the breath away from all computer users on the face of the earth," boasts die-hard Danish fan Michael Ljungstedt Andreasen.

Alas, it is not to be. Instead of building new Amigas, Gateway plans to develop Amiga-like software that will link Internet appliances over home networks. "Amiga will be the Internet-appliance infrastructure company," says a company insider.

For Gateway, which declined to

comment, the shift is part of its strategy to move into Internet services. By early next year, Amiga hopes to have test versions of the new software, which will be written in Sun Microsystems Inc.'s Java language. The interface will allow users to control household devices and download content off the Web with simple commands, the source says. Sounds great unless you're one of the disappointed Amiga faithful.

By Steven V. Brull in Los Angeles



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LABOR CELEBRATION: UAW head Yokich presses the flesh in Detroit

DETROIT

IT LOOKS LIKE A BIG PAYDAY FOR AUTO WORKERS

GM and DaimlerChrysler already are making fat opening offers

Ford Motor Co., recently hailed by North American auto workers as the most labor friendly of the Big Three, looks to be in the doghouse as the unions negotiate industrywide contracts. On Sept. 8, the Canadian Auto Workers selected Ford to negotiate its next pattern-setting contract. If there's no agreement by Sept. 21, Ford will face a strike at its nine Canadian plants.

South of the border, meanwhile, the United Auto Workers—miffed at Ford's intention to spin off Visteon Automotive Systems, its parts-making unit—has decided to shut the company out in the last days before the U.S. pact expires Sept. 14. That means Ford won't be the negotiating target and, therefore, won't have a say in setting terms for the new contract. The upshot: Ford is in a squeeze play.

LIFETIME JOB? On the other hand, the auto workers seem to have gotten downright cozy with the other two-thirds of the Big Three—as they contemplate inking the richest contract in years. At a Labor Day parade in Detroit, UAW President Stephen P. Yokich said he was encouraged by the initial offers General Motors Corp. and Daim-

lerChrysler had put on the table. "I've been here a long time. It's the best first offers we've ever gotten from Chrysler and GM," he said.

Sources familiar with GM's three-year offer say the No. 1 auto maker proposed a 2% wage increase and \$500 lump-sum the first year, followed by a 3% raise the second year, and a \$1,500 lump payment the third year. GM also proposed job-se-

ISSUES? One potential problem: Whether the car companies will agree to help unionize parts suppliers

curity enhancements that some labor experts say amount to a lifetime job guarantee for workers with at least 10 years' seniority.

DaimlerChrysler has proposed comparable terms, according to others familiar with the German-U.S. auto maker's initial offer. While the offers seem paltry compared to recent contract settlements at other major industrial firms such as Boeing Co., they are a "a good

starting point" for negotiation, comments one senior UAW official. All expect the union to win annual increases of 3% for at least three years.

With Detroit auto makers enjoying record sales and profits and sitting on nearly \$50 billion in cash between them, analysts believe it'll be impossible to resist the unions' higher wage demands this year. Indeed, at a Sept. 8 conference, Canadian Auto Workers President Basil "Buzz" Hargrove made it clear that his 50,000 members at the Big Three expect a "substantial" wage increase, especially in light of the payouts made to senior executives in recent years. "The issue isn't their ability to pay. It's our ability to force companies to share the wealth," Hargrove.

SUSPICION. While GM's offer of a lifetime job guarantee sounds enticing, there is a price. The auto maker wants to trade job security for flexibility in introducing new production methods that would shift parts-making jobs to lower-paying suppliers. The union is unlikely to go for that unless they get assurances that the Big Three will help their efforts to organize non-supplier plants. And union leaders are suspicious about promises of job guarantees. "In a market economy, there is no such thing as lifetime employment," says the CAW's Hargrove. "He says he has not received such an offer." "What we're trying to guarantee is work and wages."

With the industry on a roll, neither side expects a strike. Yet some sticking points remain. Each company has its own touchy issues on the table.

At DaimlerChrysler, for instance, the UAW wants assurances that management won't interfere with its efforts to organize two non-union plants in Alabama and North Carolina.

At General Motors, the two sides must work

out the complicated effects of GM's spinoff of its Delphi parts-making unit. And Ford, once-cozy relations significantly deteriorated over the summer, when Ford started talking about the Visteon spinoff. So while boosting workers' paychecks significantly is unlikely to be a problem, the UAW and CAW might still have some difficulty in getting company support to help build their memberships.

By Joann Muller in Detroit

Move over, speed of light.



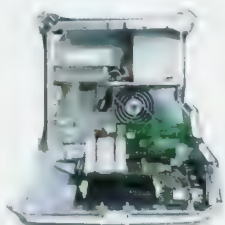






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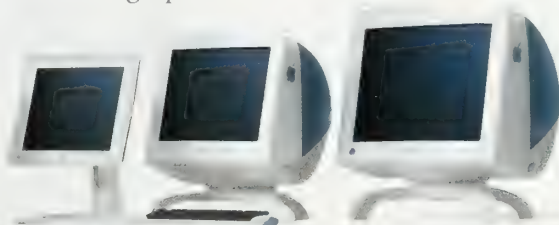
The Power Mac G4 has a revolutionary "open-door policy" that gives you easy access to every part inside.

With its Pentium-crushing speed and convention-crushing design, the Power Mac G4 picks up where the best-selling G3 left off. Its enclosure has evolved to a highly polished silver and graphite, yet it still offers easy access to every internal component through its unique swing-open side door.

Beneath its new face, however, is where the Power Mac G4 really shines. At its core is a brand-new brain—the G4 processor—that

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And we've designed the rest of the new Power Mac G4 to keep up with the processor. Our two high-end models feature a 100MHz system bus with three times the memory bandwidth of the G3. As well as superfast Ultra ATA/66 hard drives and accelerated AGP 2X graphics.



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This is not just the fastest Mac® in history. It's the fastest personal computer in history.

Rather than being just 35% faster, the new Power Mac G4 is up to a stunning 100% to 200% faster than the fastest Pentium III-based PCs.*

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What makes a supercomputer “super” is its ability to execute at least one billion floating-point operations per second. It’s a staggering measure of speed known as a “gigaflop.”

The new PowerPC G4, architected by Apple, Motorola and IBM, is the first microprocessor that can deliver a sustained performance of over one gigaflop. In fact, it has a theoretical peak performance of four gigaflops.

The secret of the G4’s revolutionary performance is its aptly named Velocity Engine™. It’s the heart of a supercomputer miniaturized onto a sliver of silicon. The Velocity Engine can process data in 128-bit

chunks, instead of the smaller 32-bit or 64-bit chunks used in traditional processors. In addition, it can perform four (in some cases eight) 32-bit floating-point calculations in

a single cycle—two to four times faster than traditional processors.

So how does the G4 with its Velocity Engine stack up against Intel’s

brand-new Pentium III processor?

To find out, we went right to the source: We used a set of Intel’s own performance tests published on their website.

Using six of Intel’s tests, the 500MHz G4 was, on average, almost three times as fast as the 600MHz Pentium III (2.94 times, to be exact).

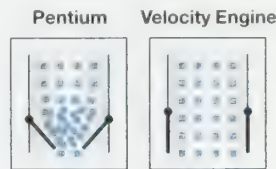


These benchmark advantages translate directly into real-world advantages.

For example, typical Photoshop tasks run twice as fast on the Power Mac G4 as they do on the fastest Pentium III-based PCs, with specific Photoshop filters running up to four times faster.* Compressing QuickTime files is also twice as fast.

In fact, "twice as fast" is a refrain you're going to be hearing often, as more and more software developers tap the power of the G4 with its Velocity Engine to accelerate

the performance of their applications — just as Adobe has already done with Photoshop.



G4's Velocity Engine can process information in 128-bit chunks, compared with the 32- or 64-bit chunks in traditional processors.

Because gigaflops really do matter when your work revolves around graphics, animation, 3D games, video

effects, 3D rendering and a host of other computation-hungry software.

Chances are, you've never even heard of a gigaflop before. But very soon you won't be able to live without at least one on your desk.

Intel Signal Processing Library Performance Specification

Test	Pentium III Clock Cycles	G4 Clock Cycles	G4 Performance	G4 Performance (Adjusted for MHz)
1024 dim. Square (bsqr1)	1.30	0.50	2.60 times faster	2.17 times faster
1024 dim. Multiply (bMpy2)	1.33	0.75	1.77 times faster	1.48 times faster
1024 dim. Dot Product (DotProd)	2.21	0.50	4.42 times faster	3.68 times faster
256 Pt. Complex FFT (FFT)	6.94	4.00	1.74 times faster	1.45 times faster
32 tap x 1024 dim. FIR Filter (bFir)	0.95	0.33	2.88 times faster	2.40 times faster
32 tap x 1024 dim. Convolution (Conv)	84.99	11.00	7.73 times faster	6.44 times faster
Average			3.52 times faster	2.94 times faster

The 500MHz G4 processor, with its Velocity Engine, is an average of 2.94 times as fast as the fastest Pentium III (600MHz)

What you really need is a supercomputer.

Supercomputers have helped achieve breakthroughs in almost every field of science. But almost no one outside the scientific community could possibly need one. Or so it was thought.

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These tasks, and many more like them, have two things in common: They choke traditional processors. And they can be dramatically sped up by exactly the kind of computational horsepower that supercomputers were created to provide.

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Price*	\$1599	\$1999	\$2799	\$3499
Processor	400MHz G4	450MHz G4	450MHz G4	500MHz G4
L2 Backside Cache	1MB 200MHz	1MB 225MHz	1MB 225MHz	1MB 250MHz
Memory (SDRAM)	64MB 1.0GB max	64MB 1.0GB max	128MB 1.5GB max	128MB 1.5GB max
Max. Memory Bandwidth	400MB/sec	400MB/sec	800MB/sec	800MB/sec
Graphics	RAGE 128/PCI 16MB graphics memory	RAGE 128/PCI 16MB graphics memory	RAGE 128/AGP 2X 16MB graphics memory	RAGE 128/AGP 2X 16MB graphics memory
Hard Drive 3 internal bays, 1 used	10GB Ultra ATA/33	13GB Ultra ATA/33	20GB Ultra ATA/66	27GB Ultra ATA/66
Removable Storage	CD-ROM	DVD-ROM DVD-Video playback 100MB Zip Drive	DVD-ROM DVD-Video playback 100MB Zip Drive	DVD-RAM DVD-Video playback 100MB Zip Drive
Ethernet 10/100BASE-T	Yes	Yes	Yes	Yes
FireWire Ports (400Mbps)	2	2	3 (1 internal)	3 (1 internal)
USB Ports	2 (12Mbps total)	2 (12Mbps total)	2 (24Mbps total)	2 (24Mbps total)
AirPort™ Wireless Networking 11Mbps IEEE 802.11	n/a	n/a	Optional	Optional
56K V.90 Modem	Built in	Built in	Optional	Optional
Apple Cinema Display	n/a	n/a	Optional	Optional

Find the new Power Mac G4 at your local authorized Apple reseller. Or build your own perfect system—
from over 15,000 configurations—by visiting the Apple Store™ at www.apple.com.



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*MSRP. Actual price may vary. ©2003 Apple Computer, Inc. All rights reserved. Apple, the Apple logo, and Think different are trademarks of Apple Computer, Inc., registered in the U.S. and other countries. Power Mac G4 is a trademark of Apple Computer, Inc. Other names and brands may be the trademarks of their respective owners.



It would take a far, far bigger page than this to show you the actual size of the Apple C.



Its 22-inch screen has a viewable area equal to that of a 24-inch flat CRT display

A revolutionary computer deserves a revolutionary display.

Introducing the ultimate companion to the Power Mac G4: the Apple Cinema Display.™ With its 22-inch screen (measured diagonally), it's the largest LCD display ever brought to market.

Its viewable area is as big as a 24-inch flat CRT display. But it's twice as bright and sharp, with triple the contrast ratio and zero flicker. And its millions of colors remain true from almost any viewing angle.

Like a movie theater, the Apple Cinema Display has a letterbox format (1600x1024 pixels), with room enough to display an entire 11x17 image. And unlike most other displays, it receives its data digitally from the computer, preserving the highest-quality image.

The Apple Cinema Display is state-of-the-art technology, and supplies will be limited. And at \$3999* it's not for every pocketbook. But if you're fortunate enough to use one, your office view will never be the same again.

EDITED BY MARK FRANKEL

SEC WHACKS KAMPEN

IF IPOs HAVE LANDED mutual-fund adviser Van Kampen Investment Advisors in hot water. On Sept. 8, Securities & Exchange Commission hit Van Kampen of Oak Brook, Ill., and its former chief investment officer with \$125,000 in penalties for failing to disclose that a new fund had built track record largely on sales from initial public offerings. As an "incubator" fund—one not yet on sale to the public—the Van Kampen Growth Fund posted a 62% return in 1996 on less than \$10,000 invested. But more than half of those gains resulted from 31 IPOs—a fact, SEC charges, that Van

Kampen didn't disclose when the fund opened to investors in February, 1997. In just over a month, the Growth Fund skyrocketed to \$110 million in assets—too big, the SEC says, to sustain its stellar returns.

YAHOO! IS SIGNING UP NET BILL-PAYERS

TODAY YOUR HOME PAGE, tomorrow your checkbook. On Sept. 8, Internet portal company Yahoo! unveiled Yahoo! Bill Pay, a new service that allows consumers to pay all their bills, from phone bills to mortgages, via the Internet. Through a partnership with CheckFree, for a monthly fee Yahoo! registered users will be able to create payee lists and select dates for when their bills should be paid. The money will then be deducted from a designated bank account. With its new service, Yahoo! will go up against many banks and online financial sites, as well as Intuit and Microsoft, which offer similar services.

SOFTWARE MAKERS GO UNDERSEA

GLOBAL CROSSING IS GETTING more global. On Sept. 8, the California-based company announced a joint venture with Microsoft and Japanese software maker Softbank to build a \$1.3 billion undersea and terrestrial fiber-optic network in Asia that will connect Japan, China, Singapore, Hong Kong, Taiwan, South Korea, Malaysia, and the Philippines. Microsoft and Softbank will both invest \$175 million and pledged to buy \$200 million in network capacity over three years. Global Crossing will contribute a 58% share of its trans-Pacific network to the new venture, Asia Global Crossing.

HEADLINER: PHILIP MARINEAU

TAKING THE LEVI'S CHALLENGE

PHILIP MARINEAU IS TRADING Pepsi Blue for the Levi 501 Blues. On Sept. 7, Pepsi announced that Marineau, 52, head of its Pepsi-Cola North America unit, was leaving to be CEO of beleaguered jeans maker Levi Strauss.

The departure is a blow to the perennial No. 2 cola. Marineau says he left because he wanted to run his own show—something that was unlikely to happen anytime soon at PepsiCo under CEO Roger Enrico, 54. On Marineau's watch, Pepsi halted the market share advance of archrival Coca-Cola, partly through broadening the

target market for Pepsi—now in blue cans—beyond its Gen X audience to a wider public. "Coke's no longer winning," says Marineau.



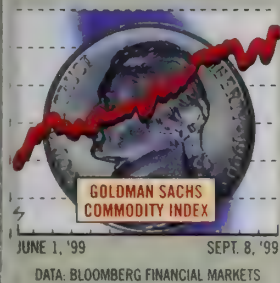
Levi's, on the other hand, needs to rebuild its following among teens and young adults. Marineau admits he has a lot to learn about the apparel business, but he intends to get up to speed by talking to retailers. Marineau is known for his stress on nuts-and-bolts marketing techniques. At Levi's, which saw sales skid 13% last year to \$6 billion, all that marketing prowess is sorely needed.

By Larry Light

CLOSING BELL

NATURAL HIGHS

COMMODITY prices are roaring back. Thanks in part to an 88% rise in the price of crude oil, the Goldman Sachs Commodity Index is up 39% this year. It closed Sept. 8 at 185, just 13% under its October, 1997 peak. With Asian economies picking up, prices of metals such as copper and aluminum are back, too. Alas for gold bugs, precious metals have missed the party, falling 10%. On the other hand, nickel is up 9% since June.



HILTON'S BUY BRINGS ONLY YAWNS

AFTER THREE YEARS OF TRYING, Hilton's CEO Steve Bollenbach has snagged a trophy. On Sept. 7, the hotel chain said it was paying \$4 billion in cash and stock to buy Promus Hotel Corp, which owns Doubletree, Hampton Inn, Red Lion, and Embassy Suites. Promus gives Hilton an array of brands in different price ranges, allowing it to better compete with Starwood and Marriott. But Promus' Doubletree brand has been experiencing weak growth and there was no applause from Wall Street: Hilton's stock fell 7% after the announcement.

A BIG BANK WRITES A BIG CHECK

SOVEREIGN BANCORP OF Philadelphia will pay \$1.4 billion to become New England's

third-largest bank. On Sept. 7, Fleet Financial Group and BankBoston agreed to sell 278 of their bank branches to Sovereign in the largest divestiture in banking history. The deal was forced by regulators as a requirement for Fleet and BankBoston's merger. Sovereign picks up an 8% share of deposits in the region's largest market, Massachusetts. State regulators are expected to okay the deal.

ET CETERA...

- Warren Jenson, Delta Air Lines' finance chief, will become CFO of Amazon.com.
- German police nabbed fugitive money manager Martin Frankel in Hamburg.
- A Federal judge refused to stop a Web site from posting Ford Motor documents.
- Tivo, an interactive TV startup, obtained backing from Sony.

Is your business manoeuvrable enough?

These days, a competitive edge is not something that lasts very long. To keep ahead you must constantly innovate—and often you'll need to manoeuvre fast, to maximize your gains.

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EDITED BY PAULA DWYER

CAMPAIGN-FINANCE REFORM: THIS TIME, THE FINISH LINE?

For years, Washington has been locked in a familiar cycle. Campaign spending soars. Inevitably, some finagling politics triggers a scandal. Reformers feel the public will finally demand changes in loophole-ridden campaign-finance rules. Yet drive fizzles, doomed by apathy and incumbent politicians' fierce desire to protect the status quo.

Will 1999 see a rerun? So far, the script looks familiar. But stock ending may be in doubt. As Congress returns from recess, reform prospects are improving. Presidential candidates are drawing attention to abuses in "cleaner-than Clinton" manifestos. Record fund-raising keeps the spotlight on checkbook politics. And some executives, weary of nonstop shake-ups, are joining the reform drive. "There's a feeling that politicians can be embarrassed" by tightening the rules this year, says New York real estate developer Daniel Rose.

LOOPHOLE? Rose and scores of other business leaders plan to blitz Congress with letters and phone calls when it revisits reform proposals this fall. First up is a House measure, sponsored by Representatives Christopher Shays (R-Conn.) and Martin T. Meehan (D-Mass.). The bill, which passed last year on a 218 to 179 vote, would ban "soft money" donations. These unlimited gifts, ostensibly meant to strengthen political parties, in reality are used to back individual candidates. The proposal would set strict limits on "issue ads" by interest groups—thin-veiled candidate plugs in the guise of voter education. The bill is expected to pass handily despite procedural roadblocks thrown up by GOP leaders. Among the threats: a "poison pill" amendment by Majority Whip Tom DeLay (R-Texas.) that would let parties accept soft-money checks for Internet campaigning, such as Web site banner ads. The result: a potentially huge new loophole.

The real action will be in the Senate. Last year, a filibuster

killed a companion bill by John McCain (R-Ariz.) and Russell D. Feingold (D-Wis.). This year, timing may help. "Having the Senate vote on the heels of the House will increase the pressure," says Donald J. Simon, executive vice-president at reform group Common Cause.

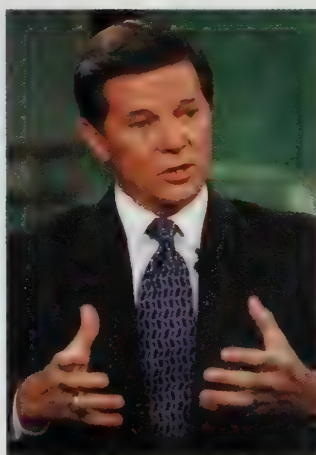
Getting the 60 votes needed to snuff out soft money will be tough. But GOP leaders are feeling the heat. Some 100 executives—among them, Sara Lee Corp. CEO John H. Bryan and Frank C. Carlucci, chairman of Carlyle Group investment bank—backed a call by the progressive Committee for Economic Development for a soft-money ban. Senator Mitch McConnell (R-Ky.), who heads the Senate GOP campaign committee, lashed out with angry letters to CED trustees, urging them to resign.

The tactic may backfire. Since McConnell's late-July blast, the CED picked up 30 more executive endorsements, reports its president, Charles E. M. Kolb. "The business community," says Feingold, "may put us over the top."

Even so, Senate prospects are iffy. To woo more Republicans, McCain and Feingold may opt for a simple soft-money ban coupled with a higher ceiling on individual gifts to candidates—so-called hard money—now set at \$1,000. They also may give up on curbing issue ads. But that's a nonstarter for Democrats, who trail the GOP in hard money and fear Republican-aligned groups will flood the airwaves with issue ads.

Reformers plan to deploy phone banks, mailings, and door-to-door lobbying. They'll get help from such ardent pro-reform executives as venture capitalist Jerome Kohlberg Jr., who vows to buttonhole lawmakers. If the odd alliance of Naderites and Country Clubbers jells, Congress may be unable to resist the clamor for change. It won't be the sweeping overhaul reformers once envisioned. But it will be something.

By Amy Borrus



DeLAY: Rearguard action

CAPITAL WRAPUP

THE GOLDMAN CONNECTION?

Is Goldman, Sachs & Co. a training ground for future New Jersey senators? Could be, if ex-Goldman partner Lewis M. Eisenberg runs, as he's considering doing now that Governor Christine Todd Whitman has opted out of the 2000 race. If Eisenberg, a centrist Republican, follows through, his Democratic opponent may be Jon S. Corzine, the ex-Goldman chairman who led the firm's initial public offering last year. Corzine has all but formally announced his bid for the seat of retir-

ing Democrat Frank R. Lautenberg.

"It's very flattering," says Eisenberg of GOP entreaties. "I am seriously thinking about it." Eisenberg, 56, had been Whitman's finance chairman. He headed Goldman's equity division in 1990, then departed to help start Granite Capital, a Manhattan money-management firm he still co-chairs. Eisenberg is also chairman of the Port Authority of New York & New Jersey.

Like Whitman, he is a fiscal conservative and social moderate. He chairs the Republican Leadership Council, which raises money for centrist GOP

candidates. He advocates smaller government and tax cuts, such as eliminating the estate tax and reducing capital-gains levies. He also thinks the U.S. should beef up its armed forces. "A strong national defense is imperative to a strong economy and our place in the world," he says.

If Eisenberg runs, he likely will face a primary fight. Possible foes might include former Representative Richard A. Zimmer. Corzine, too, could face a grueling primary contest, against ex-Governor Jim Florio.

By Amy Borrus

TIMOR: HOW HIGH A PRICE?

Economic pressure could threaten Indonesia's recovery—and its fledgling attempt at democracy

At first, the long, bloody saga of East Timor seemed to be on the verge of ending well. But now, rampaging militia, armed by the Indonesian military, refuse to accept the outcome of an overwhelming vote for independence. Hundreds are dead, hundreds of thousands more are fleeing. And the anguished international community is wondering how a peaceful polling day deteriorated so terrifyingly, so fast. But even more, they're wondering what to do about it.

The range of punitive measures being considered by governments from Washington to Canberra could turn Indonesia's fledgling democracy into an



international pariah and seriously damage economic recovery. Calls for a U.N. intervention force come at a time when foreign lending agencies also are outraged over an eruption of financial scandals. U.S. officials say relations with Indonesia are on a collision course. A group of U.S. Senators introduced legislation Sept. 8 to cut off military assistance and require the U.S. to oppose

further World Bank and International Monetary Fund aid. Says Human Rights Watch Asia Director Sidney Jones, "We believe sanctions should have been imposed months ago."

But it's an open question whether economic hammer would even hit Indonesian military—the main actor behind the bloodshed in East Timor. It will levy a price on the government

TRAPPED IN DILI, A REPORTER GETS A TASTE OF TERROR

Lisa Rose Weaver, a freelance journalist based in Jakarta, spent two weeks in East Timor before being forced out by the violence. Here is her account:

The militias reminded me of urban gangs. We—the journalists and U.N. staff there to monitor the East Timor independence vote—would see them sitting on the low wall just feet from the hotel where we had our morning coffee. Armed, and uniformed in black, long-sleeved jerseys, they cast us cold, hostile stares. Many had long hair or tattoos. Most looked angry and poor. Often they shouted at us to "go home." We had heard stories of those who tried to negotiate their roadblocks in the countryside and got a machete em-

bedded in their windshield. In the days leading up to the independence vote, they mostly kept their distance. We thought that if we kept ours, we would be safe. But the feeling of security was temporary.

In the days that followed, these men chased us through the streets, pinned us inside the U.N. compound with gunfire and threats, and leveled a gun at my chest. But that was nothing compared to what they would do to the Timorese. In their campaign of destruction in East Timor, hundreds were reported killed. Tens of thousands were marched to the sea, terrorized by Indonesian soldiers firing volleys from automatic weapons over their heads, and loaded onto ships, according to witness-

es who escaped. Buildings and houses were burned and looted.

Before I was safely evacuated from Dili, I had a taste of the horrors that were to come. On Sept. 1, another journalist and I ventured toward the U.N. compound. In streets electric with tension, we saw independence supporters attacking the militia with rocks. Within minutes, a large group of militiamen chasing us toward the compound, throwing rocks and brandishing machetes. Just before ducking inside the U.N. gate, I stood in their path long enough to see faces contorted with rage as bodies bent on destruction. In the minutes that followed, they surrounded the U.N. compound and shot up its roof as we crouched inside. Smoke be-



A TRUCKLOAD OF PROBLEMS

The international community is pondering how to react to the exile of thousands of East Timorese

military. There is debate over whether armed forces chief General Wiranto entirely controls his soldiers either. The militia members running amok in East Timor mostly are jobless youth recruited by Wiranto's former rival, Gen. Prabowo Subianto, who fled the country following the downfall of former President Suharto. Witnesses say they saw Indonesian soldiers help the militia. Wiranto imposed martial law in East Timor on Sept. 6 and replaced the region's military commander. But the situation continued to deteriorate.

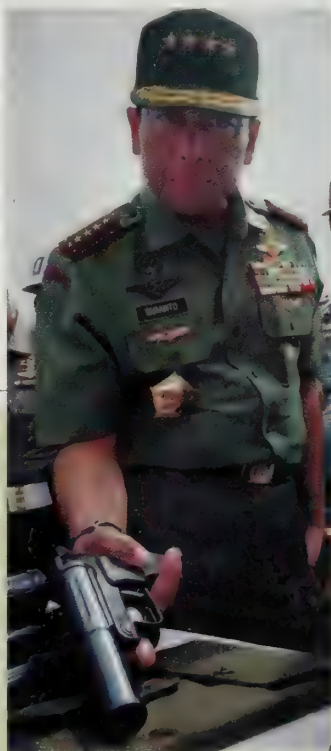
SOLDIERS' POLICY. Ending East Timor's turmoil is vital for Wiranto's political aspirations. The general is a leading contender for Indonesia's vice-presidency. But analysts say he has little regard for international opinion. His focus, rather, is on keeping the military united—even if it costs Timorese lives. If he restores order, "he becomes more valuable as vice-president," says Adam Schwarz, an Indonesia expert at Johns Hopkins University. "This is a guy you want on your side if you want to keep the peace." Other analysts believe Indonesia's

military chief abetted the violence to send a warning to other Indonesian minorities desiring autonomy. "I'd be very skeptical of the theory that Wiranto is not in control of the militias," says Australian political scientist Harold Crouch.

When Habibie called for the referendum in the spring, he was running for election and seeking global support. But hundreds of Indonesian soldiers have died in East Timor since the 1975 annexation, so the military was reluctant to give it up easily. Many soldiers believed pro-Jakarta forces would win the vote because commanders for years told them few East Timorese wanted independence. In retaliation, they now are even destroying infrastructure, including telephone service. "This is a scorched earth policy," says one diplomat.

For the residents of East Timor, it's a disaster. The U.N. estimated that as of Sept. 8, a quarter of the population had fled. Aglilio, 28, whose village came under fire, was one of them. "The only thing we can do is get out of this situation now," he says. "So long as Indonesia stays, there will be no peace, absolutely no peace." And no easy options, either, for Washington and its allies.

By Michael Shari in Singapore and Sheri Prasso in New York, with Lisa Rose Weaver in Dili, East Timor, and Amy Borrus in Washington



LOSING CONTROL?

The army in Timor may not obey Gen. Wiranto

ity to move forward on economic recovery—and not necessarily change the Indonesian army's behavior," says Columbia University Indonesia expert John Esnan.

Hampering any solution is the political vacuum engulfing Indonesia. President B.J. Habibie, a lame duck until a new government takes over in November, clearly does not control the

houses they had set on fire. The fire echoed from behind the wall, a stream of terrified people scrambling over the wall and into the courtyard. Old women carried toddlers in bundles of belongings, a look of fear and dread on their faces. They hid under tables. Most tried to comfort their children. Eventually, someone led them in song, a prayer in the local Tetum language. J.N. staff tried to tell them everything would be O.K. "This temporary event that hopefully will end very quickly," said Patrick O'Donnell, an election observer from Ireland.

On Sept. 4, the day the vote was held, what should have been a celebration for independence was instead a chaotic and ambiguous. Virtually no cars, and those evacuating the city, were stuck on the road. Indonesian police

erected barricades to block all approaches to the Mahkota Hotel, where most journalists were staying and where the U.N. had announced the vote tally just an hour before. But the authorities failed to stop one militiaman from sauntering through the barricades, pulling out a submachine gun, and rushing the hotel's front entrance. Journalists fled back inside. Armed men returned to the hotel several times that day and the next.

Since my hotel had no food and few telephone lines, I ventured out to another hotel, the Turismo. Once darkness fell and I had no safe transport, I decided to settle in for the night. The gunfire began in earnest after dark, coming closer as the night

wore on. One journalist came rushing through the garden saying: "We've got to get out of this place."

The following morning, we did. The militia made sure of it, roaming hallways to tell us to leave. Some 200 U.N. workers and 2,500 people they sheltered remained behind in the U.N. compound. For us, the police provided trucks to

the airport, where we boarded a chartered plane. As it lifted out of Dili, I could see masses of refugees crowding the docks like colorful ants. Smoke spiraled from the horizon. Just hours later, there would be much, much more. □



JAPAN

TIME FOR THIS BEHEMOTH TO EVOLVE?

The Tokyo Stock Exchange must fight new, tech-savvy bourses

Koichi Suzuki is the kind of entrepreneur who makes Tokyo Stock Exchange officials lose sleep. He spent seven years building a high-flying Web service provider, Internet Initiative Japan Inc. (IIJ). But when he needed cash for high-speed communication lines to take on mighty Nippon Telegraph & Telephone Corp., he decided to list his company in August on Nasdaq—which he regards as the big time. “I respect information-technology companies like Cisco Systems and Ciena,” says Suzuki. “I’d like to be in the same market with such companies.”

It’s another example of how the tables are turning on the financial mandarins who have long micromanaged Japan Inc. For years, Japanese companies that wanted to go public followed the same, carefully choreographed rite of passage. Almost every venture had to prove its worth in the bush leagues, first on one of the country’s eight local bourses, the over-the-counter market, or on the TSE’s second section, a trading board for second-tier corporations. If

the company met rigid criteria for performance, it eventually joined the blue chips on the TSE’s first section. Ventures were willing to wait as long as 20 years to make it to the first section.

Very orderly, very Japanese—and very stifling. The system probably starved many worthy companies of needed capital. But now the pressures of recession and deregulation are taking their toll on this arcane convoy of stock exchanges. Local bourses in Hiroshima and Niigata say they will close next year. Worse, American exchanges are encroaching on TSE territory. The New York Stock Exchange is recruiting such Japanese blue chips as Toyota Motor Corp., now listed only on the TSE. And

TSE TRADERS: The exchange plans to launch a section for startups

SoftBank Corp. President Masayoshi Son is teaming up with Washington-based Nasdaq to lure hot startups to its new board, dubbed Nasdaq-Japan, in 2001.

The institution that has the most to lose from these tectonic shifts is the TSE. At first look, that might be hard to believe: After all, the Nikkei index of TSE-traded blue chips has been on a tear this year. But trading volume on the TSE is far lower than a decade ago. Many of the listed companies, mired in losses and stuck in dead-end industries, are barely trading at all. The TSE racked up a \$1.5 million loss on \$345 million in revenues in the fiscal year ended March—its first deficit in five years. Japan’s best high-tech startups decide to skip the bourse, “the importance of the TSE will deteriorate,” says Akio Maeda, research general manager at Ichi Kango Research Institute.

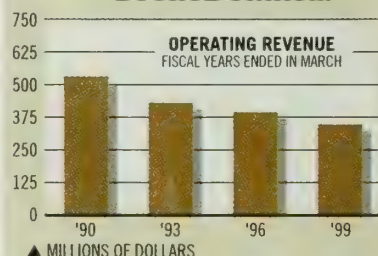
RESPONSIVE. So the TSE is starting to act. It’s planning its own market for fast-growing startups this November. It will waive a requirement that applicants post earnings for at least three years, which once prevented startups from quickly listing. It also will open a section to accept even loss-making companies. But companies must file quarterly reports, compared with twice a year now. TSE officials insist the bourse will now be more responsive to companies such as IIJ. “Today, these types of companies are going to the U.S. or because a similar market is not available to them here,” says Masamichi Yoshida, a TSE manager who screens new issues.

Yet Nasdaq, with the help of SoftBank, may still do an end run around the Tokyo exchange. “Because of Nasdaq Japan, we young entrepreneurs can go public in three to five years and attain the American dream,” says 32-year-old Junichi Izumi, who resigned in December as an executive at Hakuho Inc.

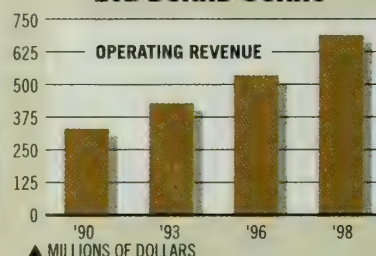
prestigious advertising firm, to launch an interactive marketing agency. A recent Japanese newspaper poll shows that 40% of companies planning to go public hope to list on Nasdaq Japan. The TSE has to compete against the kind of popularity. And competition is not something it’s used to.

By Emily Thornton
in Tokyo

WHILE TOKYO'S BOURSE SINKS...



...NEW YORK'S BIG BOARD SOARS



DATA: TOKYO STOCK EXCHANGE, NEW YORK STOCK EXCHANGE



this is your company



this is an
internet VIRUS



this is
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ON THE MOVE

Smart sales are expected to reach 80,000 this year.

per hour, was slow and small for money.

Smart's marketers count on cutting the price by \$270, boosting the advertising budget. The company even stations smart cars in plazas and offices.

GERMANY

THIS SMART CAR ISN'T SO DUMB

Suddenly, Daimler's tiny vehicle has lots of company

It's another weekday morning, and you're cruising to your office in what looks like a cross between a go-cart and a Barcelounger. You slalom between full-size cars stuck in traffic, then brake to a walking pace as you gracefully merge with pedestrians on the sidewalk. People gawk and snicker. Let them laugh. You know better: You're driving the latest Mercedes.

The vehicle is DaimlerChrysler's self-propelled armchair, and it already exists. True, at the moment, the Komfortsessel is just another concept vehicle designed to test new technology, generate publicity, and make the company appear environmentally responsible. Then again, DaimlerChrysler could be serious about mass-producing the vehicle some day. Its smart car, a tiny two-seater powered by a three-cylinder engine, started out this way. And with sales of the much-maligned car finally starting to show some life, Daimler and other European auto makers are taking a closer look at some of their designers' wildest

ideas. That means everything from three-wheelers to vehicles that morph from station wagons into convertible sedans.

Examples will begin appearing in European showrooms as early as next year. Several are based on the same general theory as the smart: Europe needs vehicles able to cope with city centers first laid out in the Middle Ages. Next year, Ford Motor Co.'s European unit will start selling a two-seat electric car called the Think in selected countries. BMW is set to introduce a carlike motorcycle with a roof, known as the BMW C1, priced at \$5,400. BMW and Mercedes have both experimented with three-wheeled vehicles that lean into curves like a motorcycle, with the passenger sitting behind the driver in a cockpit reminiscent of a jet fighter.

BAD REPUTATION. Auto makers are certain to offer more surprises when the International Auto Show opens in Frankfurt later this month. No doubt they'll be using DaimlerChrysler's smart project as a case study. Initially, the car seemed like a multibillion-dollar lesson in the perils of being too creative. The launch was delayed six months to make sure the smart wouldn't tip over too easily.

Even after costly modifications, the car, produced by a wholly owned subsidiary called MCC smart, had trouble shaking a reputation for instability. Critics also said the car, with a base price of about \$8,800 and top speed of 84 miles

per hour, was slow and small for money. Smart's marketers count on cutting the price by \$270, boosting the advertising budget. The company even stations smart cars in plazas and offices. The cars seem to be paying off. Smart expects to sell 80,000 of the quirky cars this year. That's below the original target of 130,000, but not the disaster some analysts predicted. There are signs that DaimlerChrysler, which has invested an estimated \$1.5 billion in the project, will spend more: Diesel and convertible versions are next.

SNUB-NOSED HATCHBACK. Other car makers have already shown that the original idea can pay off big. A case in point is Renault's \$13,700 Scenic, a minivan just slightly bigger than a standard hatchback. It turned out to appeal to drivers ranging from young singles to retirees, and now accounts for 17% of Renault's sales.

Innovation is also being driven by customers who are no longer satisfied with a mass-produced, one-size-fits-all car. Mercedes has already scored with its A-class, a snub-nosed hatchback that differs markedly from its traditional sedans. DaimlerChrysler sold 136,000 of the \$28,000 cars last year and expects to sell 200,000 this year.

As interest in customization grows, the smart may prove smarter than first seemed. The company can assemble one in just 4½ hours, and its plastic body panels can be replaced in an hour. Analysts once said the smart was far ahead of its time. Maybe its time has come.

By Jack Ewing in Frankfurt, with
Marsha Johnston in Paris

Europe's Radical Rollouts

FORD THINK Two-seat electric car with plastic body. Built in Norway, for introduction in some Nordic countries early next year.

BMW C1 Motorcycle with hardtop and carlike features such as seat belt and windshield wiper. To be priced around \$5,400, it's due out in early 2000.

DAIMLERCHRYSLER SMART Diesel and convertible versions, in the \$10,700 range. Due out in coming months to extend current smart line.

MERCEDES KOMFORTSESSEL Electric-powered armchair on wheels for one person. Still in experimental stage at this point.

ICIENT DILEMMA

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GERMANY

A BODY BLOW TO SCHRODER

Will losses in local elections help him get his party in line?

Peter Müller led his victory entourage like a conga line through the cobbled streets of Saarbrücken's bar district. "Peter! Peter!" they chanted. Hoots. High fives. Fists in the air as about 50 people snaked between outdoor tables crowded with diners enjoying a warm late-summer night. The exuberance was understandable: Müller had just led the center-right Christian Democratic Union party to statewide victory in the German state of Saarland for the first time in 15 years.

The CDU's return to power in Saarland, a region of dying coal mines and shuttered steel mills that is normally a Socialist fortress, is a grim omen for German Chancellor Gerhard Schröder. It came on the same day that support for his center-left Social Democratic Party (SPD) plunged in elections in the eastern German state of Brandenburg. The elections signaled grave voter disappointment with Schröder and his lurching attempts to remake the economy. Polls show more bad news is in store as Schröder faces a battery of local elections in coming months. The Saarland loss further weakens the party in the Parliament's upper house, which must approve bills that affect state finances.

GOOD OMEN. But the vote wasn't an outcry against economic reform. It may have even marked a kind of progress in Germany's stumble toward an economy that can compete more effectively with the U.S. and Britain. In fact, Schröder could use the election results to discipline his own unruly coalition and hammer out a compromise with the opposition.

With economic growth picking up, skittish voters might be more willing to accept a little short-term pain in return for long-term economic well-being. "The next two months are dramatically important for [Schröder's] political fu-



SCHRODER: The Saarland vote may help spur a compromise between the SPD and CDU

ture and authority," says Michel Friedman, a leader of Germany's Jewish community who serves as an adviser to Müller.

When it comes to reforming Germany's economy, Schröder and the CDU agree on what needs to be done—budget cuts, lower taxes, and measures to

By choosing Müller, Saarland's voters signaled that they are open to change. The 57-year-old judge, who will become Saarland state prime minister, belongs to the more progressive faction. In a state where an antique coal cart decorates the back lawn of the Parliament building, Müller says he will let coal mines fade away and focus instead on modernizing the Saar economy. Although he's vague on specifics, Müller had made clear that he won't lead Saarland back to a bygone age of big subsidies and jobs for **COMPROMISE.** Müller's policies and campaign contrast sharply with those of his rival, Reinhard Klimmt, the incumbent Saar prime minister. Klimmt succeeded and was protégé of "Red" Oskar Lafontaine—former SPD national chairman, hero of the party's left wing, and Finance Minister in Schröder's government until he left after clashes with the more moderate Chancellor.

On the hustings, Klimmt vowed to continue propping up the coal industry with subsidies. And he attacked Schröder's plan to cut \$16.3 billion from the national budget. He even called for restoration of the wealth tax. In Sept. 5 elections, Klimmt's party scored 44.4% of the vote. Müller's CDU edged him out with 45.5%.

Schröder is trying to turn the debacle into his advantage. It's easier now for him to argue that the SPD must work with the CDU, since the opposition can block major legislation in the upper house of Parliament. "All the parties recognize that reform is needed," says Ulrich Beckmann, Deutsche Bank's head of euro-zone relations.

HANDICAPPING GERMAN REFORMS

THE CHANCES

- ▶ Center-right victory in Saarland shows voters are willing to accept reforms if properly packaged.
- ▶ Opposition gains will help persuade dissidents in the center-left SPD to tone down rhetoric, accept compromise.
- ▶ All factions agree reforms are needed; room for consensus exists.

THE RISKS

- ▶ More poor election results for the SPD could fatally weaken Chancellor Schröder's authority.
- ▶ The opposition could choose to blockade Schröder proposals rather than seek compromise.
- ▶ High unemployment means that eastern German voters are in an ugly mood and thus unpredictable.

DATA: BUSINESS WEEK

prevent the collapse of the pension system as Germany's population ages. But they differ on who should benefit and who should pay. Besides finding middle ground with the opposition, Schröder needs to win the support of the SPD's left wing, which resists any change that seems to benefit the wealthy or that trims social welfare. Schröder also needs to sell his plan to the public.

search. "I'm optimistic."

Still, the next few weeks are fraught with risk as Schröder faces state or local elections in states including Thuringia, North Rhine-Westphalia, and Saxony. He has to convince German voters that his reforms are consistent with the values. If not, his "New Middle" will be a lonely place.

By Jack Ewing in Saarbrücken



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VENEZUELA

PUT MONEY INTO VENEZUELA? NO, THANKS

Chávez' political moves are scaring off investors



For many Venezuelans, the "peaceful revolution" President Hugo Chávez Frías promised earlier this year is proving to be anything but. Since February, when Chávez took office and launched an all-out campaign to end corruption and promote social justice, unemployment has doubled to more than 20% and demand for consumer products, from cars to baby formula, has fallen by more than half. Chávez has made some sensible moves, analysts say. But anxiety as to where he intends to take the country has brought investment—local and foreign—to a screeching halt. "The economy's big problem," says Boris Molina, research economist of Santander Investment in Caracas, "is the political uncertainty."

The turmoil was at its worst in late August, when the Constituent Assembly, elected by popular vote in July to rewrite the constitution, declared itself the nation's sovereign power. It seized judicial and legislative power, terming the courts and congress corrupt beyond salvation. The assembly, whose members are 95% pro-Chávez, is now auditing all public agencies to weed out graft and mismanagement. Some critics say Chávez—a former paratrooper who attempted a coup seven years ago—is using the assembly to assume something close to dictatorial powers.

The economic fallout of this political mess could be far worse. Chávez has been saved in part by a dramatic rebound in the price of oil, Venezuela's biggest revenue earner. Venezuelan heavy crude now goes for \$18.65 a barrel, compared with a low of \$7.76 in February. Chávez may be able to cut a projected fiscal deficit of \$9 billion by as much as a third. But the oil price, which has bounced during the spring and sum-



STRONGMAN

Businesspeople worry that Chávez will push through a populist program that will vastly boost state intervention in the economy

mer, did nothing for overall growth. In the first six months of the year, the Venezuelan economy still shrank by almost 10% from the year-earlier period.

Nonetheless, Chávez enjoys a 78% approval rating, since most Venezuelans agree with him that the country has been mismanaged for decades. That gives him time to pursue his political agenda. And that's just what worries the Venezuelan elite, which views Chávez as a populist intent on increasing state control over the economy. "We're headed toward a more rigid

model," says M. "We've lost the opportunity to change to a truly open, market-oriented system."

Chávez right now is focusing on measures to get people back to work and spending again. He has already launched a \$900 million public works program and the Peoples' Bank to offer out microcredits, beginning in January. Mitsubishi, Ford, GM will produce a generating "people car." Chávez plans to pay for these projects with windfall oil profits and savings from a wasteful program. He has also mandated regulatory reforms and cut

ministries from 16 to 13. In July, he pushed through a tax treaty with the U.S. He will soon approve a bilateral investment protection treaty.

THIRD WORLD. These initiatives are too alarming to business executives. Other moves are more worrying. His recent forced resignation of Roberto Mandini, president of Petróleos de Venezuela and a career oil executive, raised eyebrows. He was replaced

Héctor Ciavaldini, a low-ranking executive and Chávez loyalist. Economists now worry that the world's second-largest state oil company will be gutted to fund social programs. "We've got a first-world company in an impoverished country," Ciavaldini says. "This is the ideology we have to correct."

The new constitution is another concern. Chávez is expected to increase the

30-year-old charter's emphasis on a labor-oriented, interventionist state. Foreign investors are particularly alarmed by a proposal to require that contractual disputes be resolved by Venezuelan arbitration, not by foreign courts. Alfredo Pena, who heads the assembly's economic commission, says investors need not worry: "There will be clear rules of the game, and guarantees to free enterprise." Maybe. But as Venezuela's *caudillo* hits his stride, investors fear the rules will change dramatically.

By Christina Hoag in Caracas

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MEXICO

CAN THIS MAN CRACK OPEN THE MEXICAN MARKETS?

Mexico's top trustbuster vows to make competition a reality

As Mexico's top antitrust cop, Fernando Sánchez Ugarte has impeccable credentials. He holds a doctorate in economics from the University of Chicago, the noted bastion of free-market thinking. At the Trade & Industrial Promotion Ministry, he earned his technocratic spurs working on tax and industrial promotion policies. And as president of the Federal Competition Commission (CFC) for the past five years, the 49-year-old Sánchez Ugarte is going up against some of the most powerful corporations operating in Mexico, including Teléfonos de México and Coca-Cola Co. Can a truly open economy be far off? "People see the CFC as a nuisance," Sánchez Ugarte asserts. "But we have the last word."

If only things were so simple. Sánchez Ugarte has had his victories, certainly. But his years at the CFC are a case study in the problems of fostering competition in an economy long dominated by state and private monopolies. His biggest cases, including investigations of the state airline company, are tied up in courts. Telmex and other giants have so many political and bureaucratic allies that Sánchez Ugarte can't get at them—not easily, anyway. Penalties for price gouging and other monopolistic practices are limited to inconsequential fines. Sánchez Ugarte's goal is to instill the competitive principle in Mexican economic life, much as technocrats have won acceptance of free trade and fiscal stability. "But there's inertia from the past," he cautions.

"WE'RE MEDDLING." Sánchez Ugarte is resolved to fight that inertia. Appointed to a 10-year term by President Ernesto Zedillo in 1994, Sánchez Ugarte is protected from the political heat generated by his controversial decisions—including attacks by columnists in the financial press. "The system is based on hierar-

chy and turf," Sánchez Ugarte says in the CFC's modest headquarters. "We're meddling in the traditional structure."

That's not easy. While analysts rank the CFC among Mexico City's most professional institutions, they question how much power Sánchez Ugarte actually has. "He's very aggressive," says Luis Rubio, director of the Research Center



TECHNOCRAT WITH A MISSION

BORN December, 1949, Mexico City

EDUCATION BA, Autonomous Technological Institute of Mexico; PhD, Economics, University of Chicago

JOBS Tax expert, IMF, 1983-86; director general for tax policy, Finance Ministry, 1986-88; Under Secretary, Trade Ministry, 1988-94

CURRENT POST President, Federal Competition Commission

GOALS To uproot a monopoly tradition that reaches back to Mexico's colonial era and encourage a new competitive spirit in the economy

MAJOR TARGETS Telmex, the telecom giant, for allegedly subsidizing rates; Cintra, the airline company, for hiking tariffs on noncompetitive routes

DATA: BUSINESS WEEK

for Development, a think tank that has access to capital. "But he faces political limitations, and he's not willing or able to transcend them."

The CFC's most public struggle is against Telmex, Mexico's largest private communications company. Competitors, led by joint ventures that include MCI WorldCom Inc. and AT&T, accuse Telmex of subsidizing long-distance prices with high local rates. They say that Telmex overcharges to let competitors connect with its local network. Last year, the CFC told the Federal Telecommunications Commission to act in Telmex. But regulators so far have failed to act. They now promise to act by yearend, but they have broken such promises before. Says Telmex spokesman Arturo Elias Ayub: "We

accept competition. But we're not willing to give away market share."

Sánchez Ugarte also has set his sights on Cintra, a state-controlled airline holding company that runs several airlines, including flag carrier Aeroméxico and Mexicana. Cintra's airlines fly 82% of the flights in and out of Mexico's top cities on routes. The CFC says tickets are too expensive.

SANCHEZ UGARTE: "There's still resistance" looking into a raft of business

practices, including discriminatory travel agency commissions. He's moving cautiously. With government planning to unload a 55% stake, Sánchez Ugarte wants it to take Cintra apart in the course of privatizing it.

While both the Telmex and Cintra cases have gone to court, Sánchez Ugarte has had some clear-cut triumphs. In May, he blocked Coca-Cola's acquisition of Cadbury Schweppes brands in Mexico, arguing that the deal would lift Coke's market share to more than 70%. Although such successes are small compared with the Telmex and Cintra cases, they are helping make competition a fact of life in Mexico.

But Sánchez Ugarte needs more than modest victories. He wants stiffer penalties and more enforcement power. "There's still resistance when it comes to understanding competition," he says. With half his term to go, Sánchez Ugarte hopes to have the patience to wear that resistance down.

By Elisabeth Malkin
in Mexico City

EDITED BY JOHN TEMPLEMAN

A WIDER MIDEAST PEACE MAY NO LONGER BE A DREAM

The signing of the Israeli-Palestinian accord on Sept. 5 grabbed the world's headlines. But two little-noticed events could prove as important for laying the basis of a wider peace settlement. Syria recently warned radical Palestinian groups sheltering in Damascus that their warrior days were over. Jordan's King Abdullah followed suit by cracking down on Hamas, the militant Palestinian organization.

Indeed, the Clinton Administration and some Israelis believe a process has now started that could lead to a final settlement between Israel and the Palestinians and possibly Syria too. Certainly, there's movement in negotiations that have been stalled for years.

ELUSIVE GOALS. The election of Ehud Barak as Prime Minister of Israel is a key to that. His constructive approach toward the Arab countries is in sharp contrast to that of his predecessor, Benjamin Netanyahu, who antagonized all of them. Analysts also think that Palestinian Authority President Yasser Arafat, 70, and Syria's President Hafez al-Assad, who is at least 68, are feeling pressure to wrap up deals with Israel before they retire or die.

Yet a rocky road lies ahead. As Syrian critics were quick to point out, Barak and Arafat merely agreed to let a partial Israeli withdrawal from the West Bank—worked out a year ago—go ahead. And the Israelis and Palestinians, prodded by the U.S., have set ambitious targets. They agreed to begin talks immediately, aimed at a final agreement by September, 2000—to give Bill Clinton one last triumph.

The goal may prove elusive because the most divisive issues have been put off until then. The Israelis and Palestinians have to agree, for instance, on borders between Israel and a still undeclared Palestinian state. Also, they have to resolve Palestinians' longing to have Jerusalem as their capital and Israelis' insistence that they won't share rule of the Holy City.

Other charged issues concern the eventual return of Palestinian refugees to Israel and the fate of Jewish settlements in the West Bank.

In the past, it has been easy for Palestinian opponents of peace to halt talks with car bombs. While the Israelis expect Arafat to control such malcontents, it may prove impossible for him to rein in all who feel that the squalid Palestinian state emerging in the West Bank and Gaza is a betrayal.

That doesn't mean an Israeli-Palestinian settlement is impossible. Outlines of possible compromises already exist.

In 1996, an unofficial working party of Israelis and Palestinians suggested that the new Palestinian capital be at Abu Dis, a suburb of Jerusalem. Also, Israel has effectively acknowledged that the 200,000 Palestinian residents of Jerusalem have special status.

With fewer tangled human issues involved, it might be easier for the Israelis to reach a deal with the Syrians. What divides them are mostly questions of time and security arrangements to permit Israeli withdrawal from the Golan Heights. Any hope of success would depend on the U.S. brokering a deal that would include billions of dollars in aid.

Dan Halperin, a former Israeli economic representative in Washington, says an Israeli-Syrian accord would cost \$5 billion to \$10 billion—mostly for Israeli security outlays.

Because the Israelis and Palestinians live in such close proximity, building trust and momentum is the key to establishing a real peace. If day-to-day relations between the two peoples on the ground improve, new possibilities may open to the negotiators. But this may require considerably longer than Bill Clinton has left in office.

*By Stanley Reed in London
and Neal Sandler in Jerusalem*



ARAFAT AND BARAK: *Ambitious targets*

GLOBAL WRAPUP

GREEN LIGHT FOR PRODI

► New European Commission President Romano Prodi has emerged strengthened from European parliamentary confirmation hearings. Parliament dropped its initial demands that Prodi change some of his appointments and submit to a second confirmation round in December. The former Italian Prime Minister and his entire team, which will serve a five-year term, now have a clear mandate to pursue his pet projects. They include increasing Europe's common

foreign and trade policy initiatives, expanding the European Union eastward by taking in former communist countries, and strengthening Brussels' control over previously national responsibilities such as food safety and taxation. Most of all, he is now free to start cleaning up Europe's costed bureaucracy.

COSTLY VITAMINS

► A worldwide vitamin cartel appears ready to settle a massive private class action. Six large vitamin makers, including Switzerland's F. Hoffman-La

Roche Ltd. and Germany's BASF, are close to agreeing to pay about \$1.1 billion to end a price-fixing suit. Numerous companies that use vitamins in their products, such as Coca-Cola and Kraft Foods, accused the manufacturers of conspiring to artificially raise prices.

Both Roche and BASF already have settled criminal price-fixing charges with the U.S. Justice Dept. In May, Roche pleaded guilty and paid a record \$500 million fine for leading the conspiracy. BASF also pleaded guilty and was fined \$225 million.

TURBOCHARGING E-COMMERCE

HOW BEA WEBLOGIC DELIVERS MISSION-CRITICAL INTERNET TRANSACTIONS

Steve Graese had a problem. As Software Development Manager for Trip.com, a start-up Internet travel services provider, he knew that his firm was entering one of the most competitive business sectors on the Internet. At the same time, in order to make a profit, Trip.com had to support aggressive annual growth rates of up to 50%—without having to constantly rebuild its Internet architecture.

The answer, Mr. Graese soon found, was a software suite called BEA WebLogic from BEA Systems, Inc., of San Jose, Calif. Trip.com's BEA WebLogic implementation, launched in April 1999, immediately solved the company's core business problem, permitting a rapidly growing base of customers to obtain flight information from multiple carriers "anytime, anywhere" via the Internet—with a responsiveness that satisfied even the most demanding business users.

"BEA WebLogic saved us countless development dollars and labor hours," summarizes Mr. Graese, "allowing us to provide the best possible product to our users in the shortest amount of time."

THE INTERNET'S SECRET WEAPON

BEA WebLogic is part of a class of software known as e-commerce transaction servers, a set of computing instructions that enable an e-commerce application's various parts to electronically "talk" with one another across multiple computing platforms and devices, such as notebook computers and networked PCs. The resulting "distributed computing" architecture allows business users to take the equivalent of a mainframe computing system with them wherever they go.

"E-commerce transaction servers are the

most important class of software to emerge since the development of large-scale databases," says Alfred S. Chuang, co-founder and President of Business Operations for BEA. "Although invisible to the application users, transaction server technology is the key determinant of accuracy, speed, security, and reliability of online transactions"—making transaction servers, in the words of BEA co-founder and CEO Bill Coleman, "the secret weapon that stands behind some of the largest and most successful business sites on the Internet."

The result: more speed, more power, and greater reliability. As Internet analyst Rehan Syed of SG Cowan puts it, adding transaction servers to an Internet application is like "buying a turbocharger for your car."

A THREE-TIER ARCHITECTURE

But how does it all work? Consider the mainframe computers of the 1950s and 1960s. These were fully integrated systems, with hard-coded circuitry and databases. If you wanted to add more capacity or change the operating system, you generally had to buy another, multi-million-dollar mainframe computer.

In the 1970s and 1980s, the client-server architecture took form, in which the data and core computing instructions (the "server") were separated from the applications and user interface, which typically resided on the user terminal ("the client").

In the more recent three-tier architecture, the computing system is divided into three distinct layers: the bottom, or data, layer, where data are stored; the top, or presentation, layer, which contains the user interface; and the middle, or business logic, layer, which houses applications,



William T. Coleman III
Chairman and CEO of
BEA Systems, Inc.

(Continued)

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transaction processes, and the like.

The key to the three-tier architecture's power is its modularity: elements within each layer can be augmented, modified, or replaced entirely without having to scrap existing components or alter the system's fundamental architecture.

MISSION-CRITICAL PERFORMANCE

It is within the middle layer of this three-tier architecture that e-commerce transaction servers like BEA WebLogic operate, enabling a variety of cost-efficient computing systems, including distributed networks. The three-tier architecture's natural advantages have been magnified in a number of ways as mission-critical applications have moved more fully onto the Internet:

- **Time to market.** On the Internet, being first to market is increasingly a requirement for business success. By providing pre-built elements that can quickly and easily be linked with one another without requiring extensive custom programming, e-commerce transaction servers can significantly reduce system development costs and times.
- **Interconnectivity.** The various parts of most Internet applications exist on different computer systems, in different parts of the world. In order to operate quickly and efficiently, Internet applications must know where all of these elements are at every instant. Through real-time system monitoring, transaction servers are able to continuously and accurately route information among the application's various parts.
- **Scalability.** Internet applications often can grow from virtually nothing to industry dominance within a matter of months, necessitating unpredictable and sometimes dramatic increases in capacity. Because e-commerce transaction servers are so efficient at routing data and information, they make it possible to quickly add new data storage or transactional capabilities to a computing system without requiring expensive architectural modifications.

THE AMAZON EXPERIENCE

Amazon.com, the Web's premiere e-commerce company, has witnessed transaction servers' cost,

performance, and scalability advantages firsthand. This past July, the Internet's number one book and music retailer decided to deploy BEA WebLogic as the e-commerce transaction server for several next-generation e-commerce applications, scheduled to debut later this year.

Amazon needed a high-performance computing infrastructure that could handle millions of transactions online, explains the company's chief information officer, Rick Dalzell. Amazon turned to the transaction server model "because it provides the scalable, high-performance, robust infrastructure needed to satisfy our customers."

Amazon isn't alone in drawing this conclusion. Currently, more than 1,500 companies worldwide use BEA WebLogic transaction servers. Included in this group are scores of industry leaders, both online and off, such as Bell Atlantic, First USA, Merrill Lynch, Priceline.com, Qwest Communications, and WebMD.



Alfred S. Chuang
President, Business Operations
for BEA Systems, Inc.

ADDING BUSINESS VALUE

Ultimately, the real measure of the utility of e-commerce transaction servers like BEA WebLogic is the business value they deliver, something that Internet-centric companies like Trip.com have discovered early on. "We were happy to see just how much BEA WebLogic added to our capabilities," says Trip.com's Steve Graese. "It had so many features built in that we could concentrate our efforts on our application itself, and not worry so much about building the infrastructure."

Now, he notes, the company's customers can access their travel world wherever they are, almost instantly. "BEA WebLogic is serving a critical function for us," he says, "and for the Trip.com user."

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John Bond's HSBC

His quiet quest
to build the
world's most
profitable bank



And he has set himself a tough schedule for doing it. He needs only look out the window of his 10th-floor office in the City of London to stay focused on his goal. Looming in the distance is the gleaming silver tower that serves as Citigroup's European headquarters. Just a few hundred yards away is the partially built 42-story skyscraper that will serve as HSBC's headquarters when it is finished in 2002. Bond intends to overtake Citi in terms of profits by the time HSBC moves in. He also wants to double HSBC's stock price, which recently began trading on the New York Stock Exchange, every five years. "Today, we are a contender and not yet the champion. We aim to change that," says Bond.

AIMING HIGH

Bond wants to double HSBC's stock price every five years

Special Report

It was a rough week for John Bond. The reserved, disciplined chairman of HSBC Holdings had worked for seven months on a \$900 million deal to buy South Korea's Seoulsbank. Then, on Aug. 31, he walked away convinced that the bank's huge debts weren't worth the price. Worse, Bond's carefully-plotted takeover of New York's Republic Bank was suddenly thrown into peril. Government investigators in Japan and the U.S. have launched a probe into a Republic securities unit and one of its executives who may have inflated the value of his Japanese holdings. HSBC now says that the investigation may delay the planned acquisition, which was supposed to be completed by the end of the year.

A setback in Korea. A possible misstep in New York. These are unusual events for HSBC, one of the most risk-averse banks on the planet. But the 58-year-old Bond may have to get used to such detours. That's because he's trying to turn his institution into the world's best-performing retail bank in short order. Bond wants HSBC to be No. 1 in terms of profitability and return on equity, beating nine key competitors, from Citigroup in the U.S. to ABN Amro Holding in the Netherlands.

The question is whether HSBC, despite its acknowledged achievements in markets from Hong Kong to São Paulo, is champion material. It doesn't have the brand recognition of

This fall, HSBC will be the first bank in Britain to offer interactive banking over the customer's telly

Citi. It's still a small-scale player in the U.S. And look closely at its operations. Most of its profits still come from Hong Kong and Britain—two saturated markets that don't leave much room for growth. Hence the need to step up the pace of acquisitions, which of course increases the risk of missteps.

Bond also has a fundamental task to crystallize HSBC's global strategy—and execute it. Bond's predecessor, the flamboyant Willie Purves,

Special Report

spent the late 1980s and early 1990s snapping up properties in a bid to turn the more than century-old Hongkong & Shanghai Banking Corp. from an Asian-based colonial bank into an international powerhouse. Now it's up to Bond to make the patchwork of acquisitions a seamless operation that follows a common

playbook.

STARTING GUN. Early this year, Bond articulated a group strategy for the first time to senior managers at the group's rustic training center, Bricket Woods, outside London. The game plan, in fact, closely resembles Citigroup's. Although HSBC is smaller in size (table, page 66), both banks want to earn big profits by finding the perfect combination of consumer banking, asset management, investment banking, insurance, and corporate banking. They're both betting that they can cross-sell financial products, from credit cards to investment funds, around the globe. And they both are eyeing the possibilities of Internet banking on a global scale.

This is an ambitious

strategy for a farflung group that doesn't have the same level of integration as Citigroup. Citigroup is well ahead in asset management and insurance, while they both are chasing retail customers from Buenos Aires to Bombay, analysts say.

It's the possibilities of a global retail network that most intrigue Bond. Not just the ho-hum business of taking deposits: Bond's mantra is "wealth management"—doing everything from offering mortgages to Brazilians to investing the assets of his wealthiest Saudi Arabian clients. "We want to

STANDING TALL IN HONG KONG HSBC emerged from the Asian crisis in good shape



100% of our clients' business," declares Bond. That's the attraction of the Republic Bank, which finance wizard Edmond Safra turned into a high-profile but lucrative private banking machine.

Technology plays a big role here. HSBC was the first institution to offer online banking in Britain. And this fall, it will be the first bank in Britain to offer customers interactive banking services through their television sets, a joint project with Rupert Murdoch's British Sky Broadcasting. In Asia, it's about to launch an E-commerce service together with Compaq Computer Co. And HSBC is pioneering screen-based stock trading in Hong Kong. Still, analysts say HSBC's technology lags that of Citigroup, which allows customers to do more over computer and phones.

To get more high-end accounts, HSBC must i

HSBC'S GLOBAL REACH

ASIA With 39% of profits coming from Asia-Pacific, HSBC is still the region's biggest lender, although Standard & Chartered and Citigroup are catching up quickly. Offers customers from China to India managed accounts, securities trading, credit cards, insurance, and other services.

EUROPE Accounts for 42.3% of profits, with most of the business through Britain's Midland Bank, which offers customers all retail banking services including insurance and investments. HSBC Investment Bank PLC handles all commercial banking and capital markets activity.

NORTH AMERICA Accounts for 13% of profits. Still a minor player in the U.S. despite the planned acquisition of Republic New York and Safra Republic Holdings. HSBC aims to use Republic to build up its private banking business around the world.

LATIN AMERICA Contributes 6% to group profit, even though HSBC only entered the region two years ago. Active in Brazil and Argentina, where it invested \$300 million to consolidate its position and owns two insurance companies. May boost 20% stake in Mexico's troubled Banco Serfin.

MIDDLE EAST Strong presence in private banking and trade finance through ownership of the British Bank of the Middle East. Controls banks in Egypt, Saudi Arabia, and Cyprus, where it launched the country's first Internet bank.

DATA: COMPANY REPORTS

MISSION: When Bank of America invested in new technology, they knew success required that people could use it. But how? Traditional training was too slow; hiring new employees too expensive. Lockheed Martin's solution: a business-smart process called reskilling. It uses real projects to teach new skills, guided by experienced coaches.

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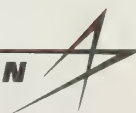
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One sore spot is South Korea, where HSBC has abandoned a quest to acquire Seoulbank

prove its name recognition around the globe. That's why Bond has launched a \$100 million global branding campaign to unite HSBC's 5,000 offices in 79 countries under a single name for the first time. From bank branches on New York's Upper West Side to offices in Malaysia, HSBC's 20 million clients will now be greeted by its distinctive red-and-white, hexagon-shaped logo.

It could take years for HSBC to become more of a household name, and it may never be able to rival Citi on that score. Nevertheless, Bond is determined to finish the job that Purves started of turning HSBC into a top-performing, truly global bank. Bond's goal is to balance earnings equally between developed and developing countries. So he's going to keep making strategic acquisitions. He's looking at two banks in Thailand, Bangkok Metropolitan and Siam City Bank. And HSBC may consider upping its 20% stake in Mexico's Banco Serfin.

Bond has plenty of strengths to leverage. The bank already ranks among the most profitable. Earnings for the first half of 1999, released Aug. 2, showed profits of \$2.7 billion, up 12% from the same period in 1998. Return on equity was 15.9%. That's impressive given that HSBC's chief franchise—the economy of East Asia—is still recovering from the worst financial crisis since World War II. Says Ronnie C. Chan, chairman of Hong Kong property developer Hang Lung Development Co. and a longtime customer: "HSBC can survive problems like the Asian crisis better than almost anybody else."

Still, Bond isn't satisfied. He wants to get HSBC's return on equity back above 20%, where it was before Asia's markets tanked. And it's true that HSBC's profit performance varies sharply from market to market. In Asia outside of Hong Kong, for example, HSBC has run into trouble. Although bank officials won't comment,

HSBC is believed to be one of the largest foreign lenders to Daewoo Group, which is

Special Report

dangerously close to defaulting on its \$10 billion in foreign debt. Risk controls were less stringent in Malaysia, which accounts for half of the \$425 million in bad debts in HSBC's Asian portfolios outside Hong Kong. But HSBC Bank Malaysia Berhad plans to cut its workforce by 1,000 people by yearend. Meanwhile, the recession in Argentina is hurting profits as HSBC boosts its provisions for bad loans.

These problems underscore the importance of Bond's plan

to bring in the cash-generating Republic Bank, whose acquisition may now be delayed by the investigation. Most analysts think that the deal will eventually go through but that one may be able to shave the price. Assuming the takeover is completed, Republic would double HSBC's private banking business overnight by bringing in 30,000 clients from Europe, Latin America, and Asia and 50,000 U.S. retail customers.

NEW YORK ATM CUSTOMERS HSBC has a long way to go before it can gain the name recognition of archrival Citi



HOW HSBC STACKS UP AGAINST GLOBAL RIVALS

BANK	ASSETS*	PROFITS	ROE**	P/E***	MARKET CAP	PROFITS PER EMPLOYEE
ABN-AMRO	\$450	\$1.8	16.9	15.1	34	\$16,900
CITIGROUP	669	5.8	14	17.9	148	34,159
DEUTSCHE BANK	653	1.8	10.3	15.8	32	23,886
HSBC	483	4.3	15.9	20.8	106	31,649

* BILLIONS **RETURN ON EQUITY ***BASED ON 1999 EARNINGS AS OF AUG. 25
DATA: COMPANY REPORTS, BUSINESS WEEK

HSBC execs are required to fly economy class.

Bond's personal life is just as mundane. "I'm married with three children and a dog—thoroughly boring," he offers by way of personal information after persistent prodding. "You won't find any star culture around here," adds Bond, who joined HSBC when he was 19 years old, after working on a cargo ship that sailed from Long Beach, Calif., to Hong Kong. Known as a technocrat and a quiet consensus builder, he earned his spurs in the late 1980s in Buffalo, where he turned around the old Marine Midland Bank acquired by his predecessor, Purves. Then he moved on to Britain's Midland Bank. He was named chairman of HSBC in May, 1998.

The Midland turnaround shows HSBC at its best. HSBC paid \$6 billion for control of Midland, the smallest of Britain's four major commercial banks, in 1992. Since then, the bank has slashed 4,000 jobs, increased income, and poached a significant

"Republic will give a jump of 10 years in high-end private banking," says Bond, who hopes to sell a broad range of financial products to Republic clients. At the same time, Bond plans to gain as much as \$350 million in intertax savings by bringing together the HSBC and Republic back offices. Analysts expect the bank to close up to 20 of its New York branches.

TUBE COMMUTER. To see that task, Bond asked Jim Cleave, the former CEO of HSBC Canada and Marine Midland, to come out of retirement to serve as Republic's CEO. Known as a cost-cutter, Cleave will have to take his knife to Republic staff costs, which average nearly twice those of HSBC, one of the most tight-fisted employers in the business.

That policy comes straight from the top. Bond earns \$1.1 million a year, for example, far less than Citigroup co-chief Sanford Weill's \$167 million compensation. Bond takes the London underground to work and is known for admonishing co-workers to switch off the office lights.

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HSBC's no-nonsense SWAT team tersely told one property mogul: "Don't put more money into Bangkok"



able share of the British mortgage market across its 1,700 branch network. And it has made a major push into wealth management. Sales of insurance and investment products rose by 18% in the first half of this year alone.

HITTING THE BEACH. All these efforts have made Midland one of Britain's most profitable banks. Pretax profits for the first half of 1999 increased 12%, to \$1.5 billion, and return on equity hit 27%. "It is clear that Midland benefited enormously from HSBC's network and scale," says Simon Samuels, senior banking analyst at Salomon Smith Barney in London. Bond hopes to integrate Republic into the HSBC group in much the same way.

Midland's profits have countered the turmoil in Asia. When the Asia crisis started to brew, Bond dispatched members of

Special Report

the bank's SWAT team, an elite group of 370 international officers handpicked and groomed by top management to parachute into troubled markets and whip the franchise back into shape. Within the industry, the cadre of executives is often described as the marines of HSBC.

Hong Kong's high-flying property mogul and infrastructure developer Gordon Wu was one of the first to get a call from the marines. "They told me only one thing, 'Don't put more money into Bangkok,'" recalls Wu, who was pouring money

into a troubled Bangkok mass transit project. He toughened his stance in negotiations with Thai authorities and avoided default on his debt to HSBC, although his company had to write off more than \$100 million. The team was seen with other borrowers, too. It issued warnings to one of Hong Kong's most aggressive developers, the Sun Group, forcing it to shed such assets as New York's Four Seasons Hotel to raise cash.

Now that the crisis is ebbing, HSBC has to deal with the changing banking business in Hong Kong. For years, HSBC has enjoyed a privileged position as a leading member of the local interest-rate cartel, which has allowed HSBC and other banks jointly to lock in interest rates, essentially locking in fat returns. But the cartel is set to be dismantled over the next two years, so the spreads between what HSBC pays to depositors and what it charges borrowers are sure to narrow. To make up the difference, HSBC figures it will have to charge for services that are now free, such as low-balance checking accounts and checks. That could scare some customers away. But HSBC hopes

WORK IN PROGRESS

The bank's new Canary Wharf headquarters in London should open in 2002

marketing clout will make it a winner, while many small banks will be forced to merge.

HSBC is also boosting its Asian income by playing a more aggressive game. In Japan, for example, HSBC is helping Japanese companies restructure their operations and sell off money-losing units. The bank handled the bidding war for International Data Communications Inc., a telecom player acquired by Cable & Wireless PLC. Before, "HSBC was regarded as a fragmented player," says Stuart D. Pearce, chief executive officer of HSBC Securities Japan Ltd. But "we are starting to show up on the radar screen as a big integrated player."

That's exactly what John Bond aims to do, more and more. Much depends on quickly bringing Republic Bank into the HSBC fold and finding other properties to turn into quick money machines. HSBC has come a long way since the day when it was a sleepy Hong Kong bank. But the final step from contender to champion is always the hardest.

By Kerry Capell in London and Mark Clifford in Hong Kong, with bureau reports

Environmental activist



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COMMENTARY

By Paul Raeburn

DRUG SAFETY NEEDS A SECOND OPINION

Five years ago, at the American Heart Assn.'s annual scientific meeting, reporters crowded into a room at the Dallas convention center for details of an exciting finding in women's health. A \$20 million government-funded study had found that giving estrogen and another hormone to women after menopause boosted their levels of so-called good cholesterol, cutting their heart disease risks by a spectacular 25%. "If my mother were alive now, I would want her on the hormones," said one of the study's authors.

The finding made perfect sense: Women's estrogen levels fall at menopause, and the incidence of heart disease climbs. Giving estrogen seemed the obvious solution.

The story is not so simple, however. The study showed only that the women had improved cholesterol levels. It did not show that they had fewer heart attacks or deaths. When the follow-up study was done, researchers were surprised to find no reduction in heart attacks or heart-related deaths. The point is that beneficial effects on cholesterol, blood pressure, or other indicators are not sure signs that the drugs will actually reduce disease and death.

DANGEROUS. The case demonstrates why the FDA needs to tighten its rules for drug testing. Drugs to treat heart disease, obesity, and other ailments are routinely approved by the Food & Drug Administration on the basis of their beneficial effects on such physiological measures. For many of those drugs, the follow-up studies—looking at effects on disease and death—have never been

done. "In the late 1990s, millions of Americans are taking antihypertensive and antidiabetic therapies that have not been adequately evaluated in large-term clinical trials," Dr. Bruce M. Psaty of the University of Washington and his colleagues wrote in the Aug. 25 issue of the *Journal of the American Medical Assn.*

Among the examples, Psaty says, are the treatment of hypertension with so-called ACE inhibitors, such as AstraZeneca

mortality by a staggering 44%, Psaty notes. Even therapies such as the estrogen treatment, which had no effect, can be a public-health problem. They consume scarce health-care dollars, and patients may be given these drugs as a substitute for other, better treatments.

SHORTCUTS. The issue arises from the FDA's practice of approving drugs on the basis of scientific shortcuts. If a drug is shown to reduce cholesterol or to lower high blood pressure, the FDA assumes it will reduce deaths and heart attacks. So the drug is approved.



PLC's Zestril and Merck's Vasotec, and calcium-channel blockers, including top-selling Norvasc from Pfizer. According to IMS Health Inc., which tracks drug usage, doctors wrote 99.7 million prescriptions for ACE inhibitors and 91.5 million prescriptions for calcium-channel blockers in the year that ended in June.

Some drugs turn out to be dangerous upon further testing. A cholesterol-lowering drug called clofibrate was found to lower the risk of heart disease, but it also boosted overall

Physiological changes such as reductions of cholesterol or blood pressure are referred to as "surrogate endpoints."

These surrogate studies are of great value in drug testing. It is cheaper and faster to determine a drug's effect on cholesterol or high blood pressure than its effect on disease and deaths. As Psaty notes, a study showing cholesterol reduction might require 100 patients and take less than a year. A study showing effects on heart attacks could re-

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If large trials were required for all drug approvals, "it would discourage development," says an FDA scientist

quire several thousand patients and take five years to complete—because that's what's needed to tally enough heart attacks for the study to be valid. Such studies are consequently far more expensive: Costs can reach tens of millions of dollars.

Use of the surrogate endpoints can get new drugs to patients much sooner. That was critically important in drugs for AIDS, for which there were no effective treatments. Drugs were approved on the basis of their favorable effects on the immune system. Only later was it shown that the treatment effectively fought the disease itself.

RISKY RELIANCE. Critics say, however, that reliance on surrogate endpoints is risky. "It's probably best not to rely on surrogate endpoints unless you have extremely strong evidence to support doing so," says Dr. Gordon H. Guyatt of McMaster University in Hamilton, Ont., who also wrote on the subject in the Aug. 25 issue of the *Journal of the American Medical Assn.* The only way to be certain that drugs reduce disease and deaths is to study the question with what are called randomized, double-blind clinical trials. In these trials, patients are randomly given either the drug in question or a placebo. Neither the patients nor the doctors treating them know who is getting the drug until the clinical trial is completed.

Asked to comment about the two articles, Pfizer spokesman Andrew B. McCormick said: "We certainly think lowering blood pressure is a good endpoint, and we believe the data has validated that position." Dr. Laurence Hirsch, vice-president of public affairs for Merck Research Laboratories, noted that many follow-up studies would have to compare new drugs with existing drugs, because giving a placebo is unethical when effective treatments exist. "It complicates things because the studies have to be

enormous," Hirsch added. "It's very, very difficult."

Dr. Robert Temple, associate director for medical policy at the FDA's Center for Drug Evaluation & Research, thinks the concern about surrogate endpoints is somewhat overblown. He acknowledges that ACE inhibitors have not been proven to provide better outcomes for people with high blood pressure but notes that they've been tested in many other circumstances. "They've been shown to improve survival after heart attack and virtually every degree of heart failure there is. Do I think they are likely to not have the

that are harmless but ineffective.

There is, however, a way out. The FDA itself has suggested an alternative by putting some drugs into what it calls "accelerated approval." When there is an extraordinary need for a new drug to reach the market to save lives, the FDA requires that larger trials be done after the treatment is approved on the basis of surrogates. Psaty and his colleagues favor extending that approach to other drugs that are not part of the accelerated-approval process. It's a kind of middle road: Drugs are not delayed on the way to the market, but pharmaceutical companies would be re-

Short-Term Evidence vs. Proven Benefits

Many drugs are approved on the basis of their effects on physiological changes, such as lowering cholesterol or high blood pressure. But long-term trials looking at disease or deaths are needed to prove a drug's effectiveness. Here is the status of some widely used drugs:

CLASS OF DRUGS	SHORT-TERM TEST RESULTS	LARGE-SCALE STUDY RESULTS
CALCIUM BLOCKERS	Lowered high blood pressure	No proof they prevent deaths in patients with hypertension
STATINS	Lowered cholesterol	Found to reduce heart disease
PROTEASE INHIBITORS	Boosted immune system	Found to increase survival in AIDS patients
HORMONE REPLACEMENT	Improved cholesterol levels	Found to have no effect on heart attacks or deaths
CLOFIBRATE	Lowered certain heart disease risks by 20%	Increased mortality by 44%

SOURCE: JOURNAL OF THE AMERICAN MEDICAL ASSN.

expected benefit in hypertension? Of course not," he says. Temple worries that if large trials were required for all drugs, some might never reach the market. "It would discourage development," he says. "I think people wouldn't bother."

That's the essence of the problem: Requiring proof of a real health effect for every drug before FDA approval may delay the arrival of some effective drugs for years, or perhaps prevent some of them from ever being approved. On the other hand, continuing the current practice could allow harmful drugs to reach the market, causing needless suffering and deaths. Or it could mean that billions are wasted on treatments

quired to follow up with the larger, expensive studies. In this case, they would be doing the costly studies when revenues from a drug have already begun to flow in.

Under this approach, drug companies would be allowed to rely on surrogate testing only in cases where there is no doubt that reliance on the surrogates is safe. The cost of testing drugs would rise, and the pharmaceutical industry might see that as a burden. But those costs are likely to be far outweighed by the savings from pulling ineffective or harmful drugs off of the market.

Raeburn is BUSINESS WEEK's senior editor for science and technology.

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PHARMACEUTICALS

TRAWLING FOR CANCER CURES

Pharma Mar could net big profits from poisonous creatures under the sea

Just off the Spanish Mediterranean island of Formentera, a colony of sea squirts hangs from a submerged wire frame. Light purple and squishy, they resemble bunches of anemic grapes. Zeltia, a small pharmaceutical company based in Madrid, is breeding the sea squirts for their toxic secretions, whose novel molecular structure is the basis of a promising poison pill against cancer.

Already, the lowly sea squirt has stirred a tidal wave in Spain's stock market. In the past 12 months, Zeltia's stock value has more than tripled, to \$14, or more than 100 times earnings. That's quite a feat in a market dominated by safe-bet utilities such as Telefonica and Endesa. Driving Zeltia's stock is the company's biotech startup, Pharma Mar, which develops anticancer drugs from exotic marine organisms gathered across five oceans. "It's chemical warfare down there, and poisons kill cancerous cells," says David Newman, head of marine collections at the National Cancer Institute in Bethesda, Md. Zeltia—with a 67% stake in Pharma Mar—is now Europe's No. 1 biotech stock, easily outperforming Bloomberg's biotech index. Net profits in 1998 were \$4 million, on sales of \$50 million.

BIOTECH UPSTART. Pharma Mar is emerging as a leader in marine anticancer drug development. The sea squirt is the source of two of its most promising compounds—Esteinascidin 743, commonly called ET743, and Aplidine. Last year, ET743 surprised the biotech world by shrinking sarcoma soft-tissue and melanoma skin-cancer tumors in humans during Phase I clinical trials. "Phase I trials are just to test toxicity [not effectiveness],

SEA SQUIRT:
Its secretions
shrunk
tumors



so to get positive results like these is really very unusual," says Chris Twelves, the scientist running ET743 trials in Glasgow. In January, Aplidine, which shrinks gastric, prostate, and bladder tumors, was accepted for human testing. Zeltia stock soared, with

more than \$40 million worth of shares trading in one day.

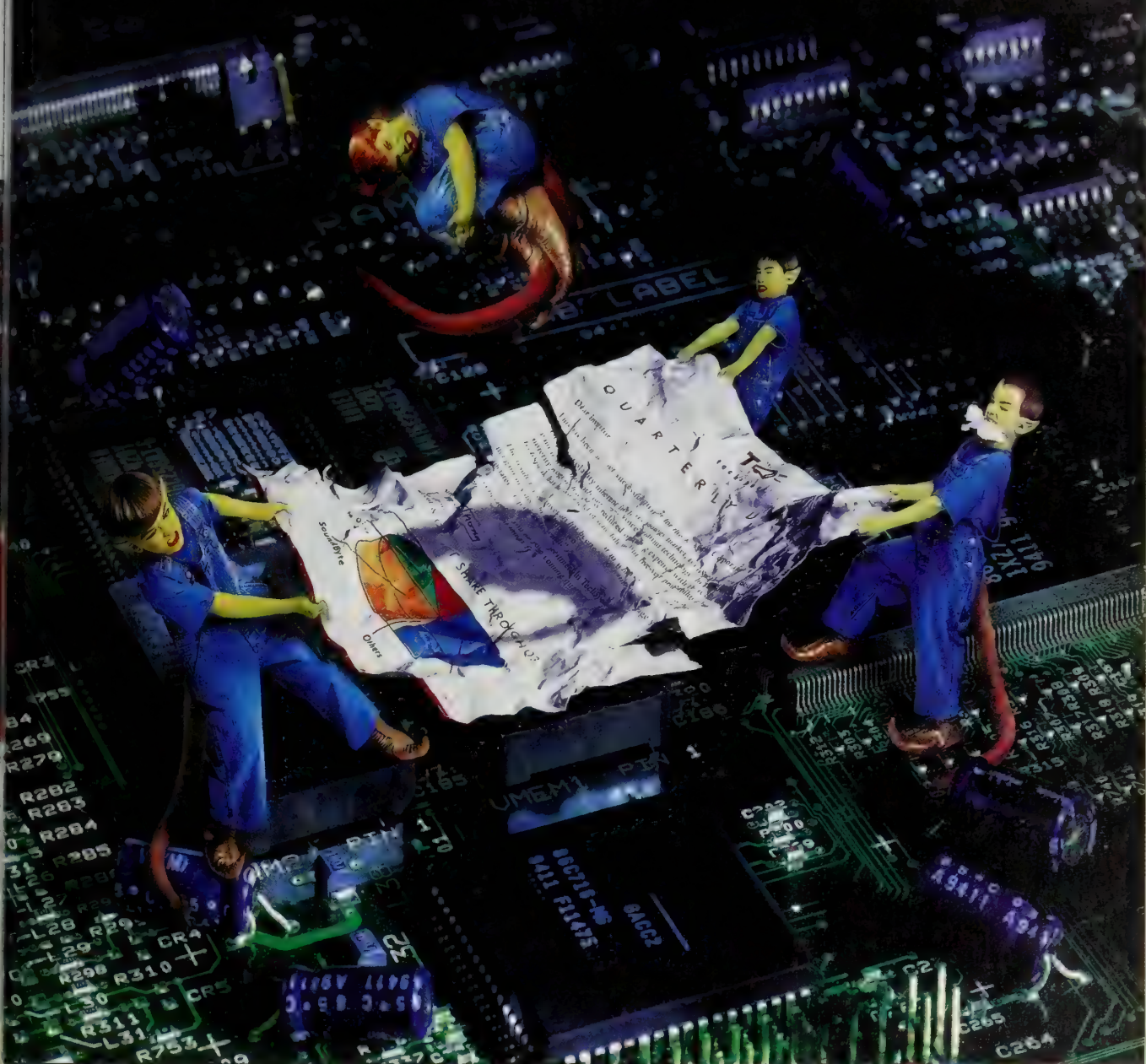
Other new compounds are in the pipeline. Kahalide F, extracted from a Hawaiian marine mollusk, is proving effective in animal trials on prostate cancers. Microorganisms found in coral o

Zeltia's Undersea Drug Harvest

DRUG	SOURCE	POTENTIAL USE	CURRENT STATUS
ESTEINASCIDIN 743 (ET743)	Sea squirt found in the Mediterranean and Caribbean Seas	Shrink skin cancers and tumors in breasts and lungs	Phase II clinical trials
APLIDINE	Sea squirt found in Mediterranean Sea	Shrink tumors in pancreas, stomach, bladder, prostate	Phase I clinical trials, expected launch 2002
THIOCORALINA	Coral microorganism from Atlantic Ocean, Mozambique Straits	Shrink breast and lung tumors	Preclinical trials
KAHALIDE F	Marine mollusk found near Hawaii	Fight prostate cancer	Preclinical trials

DATA: ZELTIA

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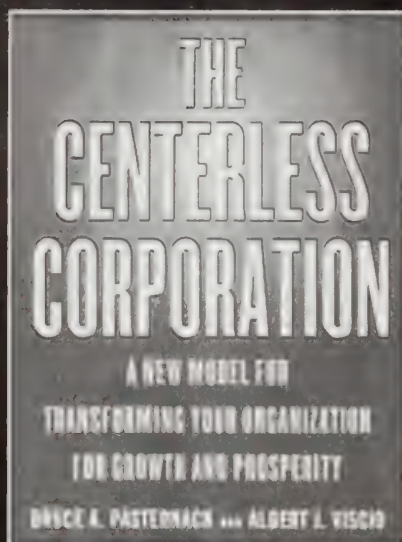
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the coast of Mozambique show greater market potential, with positive results on breast cancer tumors in mammals. "Pharma Mar has such a wealth of marine compounds, more than any other company I know," says Linda Pullman, a scientist at Amgen Inc., a leading U.S. biotech company.

Jose Maria Fernandez, the 54-year-old president of Zeltia, has been waiting years for this moment. Born into the Sousa-Faro family, which controls the canova, Europe's biggest fishery, he was trained as a biochemist. In 1985, he came chief executive of Zeltia, which makes insecticides and industrial paints. With the benefit of his family background, Fernandez was one of the first



FERNANDEZ: His family controls Europe's biggest fishery

to realize that a fleet of refrigerated trawlers and a global network of fisheries could be used for scientific research. "We're running out of earth-based anticancer agents, but the sea still has huge possibilities," he says.

In 1987, Fernandez set up Pharma Mar. Soon after, the company's researchers hopped rides on Pescanova trawlers to collect samples of marine invertebrates accidentally fished up the nets. Back in Madrid, and at Pharma Mar's labs in Cambridge, Mass., scientists studied the toxic substances that protect such marine animals as mollusks, sponges, and sea squirts from predators. They isolated novel chemical structures, which they are using in the drugs.

Pharma Mar is attracting top-class scientific talent. Ruben Henriquez, PhD from Rockefeller University in New York, left Novartis to take over drug discovery at Pharma Mar. He says he prefers the high-risk environment in Madrid. "We respond much faster to

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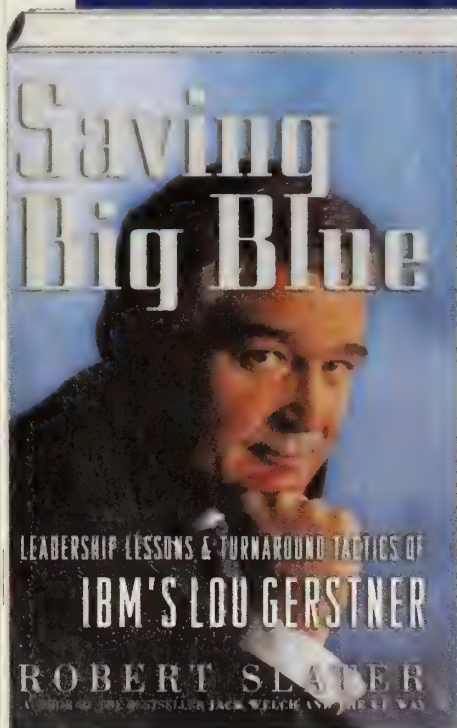
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problems here because everyone knew they would be personally hit if a pound fails," he says.

Despite its research successes, Pharma Mar has yet to get any of its products on the market. Only 1 in 10 products that begin clinical trials makes it the way to approval from regulators such as the U.S. Food & Drug Administration, says Newman. "ET743 will come a long way, but it can still die," warns. If ET743 fails at the final hurdle, Zeltia's share price will go into free fall, warn Madrid market analysts. That's the fate of British Biotech PLC, another great European hope. Its stock price has plummeted almost 100% since it showed that its much-hyped drug Metastat was no better at fighting pancreatic cancer than rival products.

COSTLY PRODUCTION. Some potential licensees are concerned about production costs. ET743 is a powerful compound, 200 times more potent than Bristol-Myers Squibb Co.'s star anticancer drug, Taxol. Total production of just 2.5 kilograms would be enough to satisfy a world market the size of Taiwan's, reckons Pharma Mar management. But at least one ton of sea squirts would be needed to make one gram of ET743. Pharma Mar's Formentera farm fails to yield a big enough harvest, the demands on natural stocks of the sea squirt would be enormous. Nobel prize-winning biochemist E.J. Corey has synthesized ET743 at his Harvard University laboratory for Pharma Mar, but the process is complicated and could be costly.

Still, ET743 needs only to repeat its exceptional initial trial results for skin and sarcoma tumors to be on the fast track to the market. Pharma Mar also hopes that ET743 will gain approval for treatment of breast and lung cancer where results so far have been promising, if less dramatic. If ET743 proves effective for more common cancers, worldwide sales could reach \$1 billion, says Nick Woolf, a biotech analyst at London-based investment bank BancBoston. Robertson Stephens International LTD.

Fernandez says he is "confident but not complacent" that ET743 will be on the market in the U.S. and Europe by the end of next year. He has rejected offers of up to \$100 million for the license, hoping to notch up the price once Phase II has been successfully negotiated. If it is, Fernandez plans to spin off Pharma Mar from Zeltia and list it on Nasdaq. Both cancer patients and Spain's new class of risk-loving biotech investors are hoping that happens.

By Andy Robinson in Madrid

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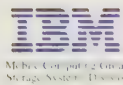
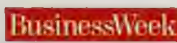
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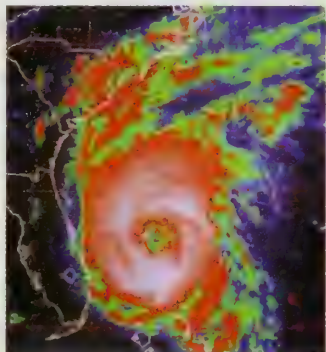
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EDITED BY ELLEN LICKING



READING WHAT'S WRITTEN ON THE WIND

RESEARCHERS AT THE University of Wisconsin at Madison—a place better known for record snowfalls than tropical storms—have developed new satellite tools that are helping forecasters track hurricanes and monitor their intensity. The new technologies are based on a technique that merges the images taken by a string of satellites, each of which has its own view of earth, into a high-resolution composite graphic. Information, say temperature, can then be extracted from the montage and used in models. Meteorologists at the National Hurricane Center in Miami are currently using the innovative tools to improve their forecasts.

One of the many new tools available is a computer program that uses pattern-recognition software to measure hurricane intensity. This software scans satellite images and generates a number that quantifies the storm's strength. Previously, hurricane intensity was mostly subjective, based on the judgment of the forecaster on duty. "But this method takes the human guesswork out of the process," says Christopher S. Velden, one of the algorithm's designers. With hurricane season under way, that's something coastal residents from Texas to Virginia will be glad to hear. □

IN SHEEP'S CLOTHING, A BALM FOR LUNG DISEASE

UNIVERSITY OF FLORIDA researchers are doing preliminary tests to see if a drug produced in the milk of genetically modified sheep can help people with chronic lung problems. The drug, a human protein called alpha-1-antitrypsin (AAT), is being used to treat six patients who suffer severe lung inflammation and emphysema because their bodies lack the means to produce the protein naturally. It was developed by PPL Therapeutics PLC of Edinburgh, Scotland, the creators of the cloned sheep Dolly.

Patients with AAT deficiency currently receive weekly injections of the drug that cost between \$60,000 and \$80,000 annually. Worse, because the drug is derived from human plasma, it's in

short supply, leaving many of the 100,000 Americans with the disease clamoring for treatment. If PPL's recombinant version of AAT works, doctors could count on having an enormous drug supply at potentially cheaper prices. "It's just a matter of expanding the flock of transgenic sheep," says Dr. Mark L.



Brantly, the project's lead researcher. Because PPL's drug is delivered as a mist that's inhaled just twice a day, patients could administer the drug themselves, avoiding the painful jabs of a needle and time-consuming visits to the clinic. "Quality of life will definitely improve," says Brantly. □

IS THE SEA NOW A GIANT PETRI DISH?

GLOBAL WARMING AND POLLUTION HAVE CAUSED AN alarming spread of ocean diseases over the past six decades, according to a team of 13 biologists. In their survey of marine pathogens, appearing in the Sept. 3 issue of the journal *Science*, they discovered that diseases usually associated with one species, including nonmarine life, are increasingly spreading to other kinds of animals and plants in the sea, many of which may be disappearing without notice. For instance, the same scourge that is killing coral reefs may be decimating crabs and snails.

The researchers, led by C. Drew Harvell, an associate professor of ecology at Cornell University, say the culprits include long-term warming trends, extreme El Niño-types of weather events, and such human activities as aquaculture. Because of these pressures, overstressed marine life may be losing its ability to fight off diseases.

The biologists examined reports of marine diseases from 1931 to 1997. Not only did they find that the incidence of ocean diseases increased during the period but most "new" ones were caused by shifts to other species rather than the emergence of unfamiliar pathogens. The report cited 34 such examples, including seals infected with distemper from dogs and corals killed by soil-borne fungi.

Catherine Arnst

BENDING LIGHT WITH A NEW BREED OF FIBER OPTICS

OPTICAL FIBERS ARE OR called light pipes. That turns out to be much more accurate than previously imagined. Unlike ordinary optical fibers, which are made of glass, a new breed of hollow-core glass fibers has a hollow core for piping light.

Making these wispy glass straws is more complicated than "pulling" a solid fiber, a process that is similar to stretching a wad of taffy until it's a thread many yards long. So the hollow-core fibers produced by a team of British researchers at the University of Bath, described in the Sept. 3 issue of *Science*, may have only limited potential for telecommunications. However, what the new fibers promise to do over short hauls is astonishing.

For one thing, they can pipe light around 90-degree corners. That means optical chips suddenly become feasible. Today, optical chips are uneconomically large because solid fibers leak light at sharp corners, so optical circuits now have to turn gentle curves. The hollow-core variation avoids corner leaks with some optical trickery: patterns of holes in the glass are small for photons to squeeze through. Contrary to what you'd expect, adding holes transforms the glass into light insulator.

Theoretically, tiny holes can also be used to create novel beams of interacting light, according to John Pendry, head of physics at London's Imperial College. Normally, light beams just pass right through each other. But interacting beams could perform switching, like transistors. Thus, all-optical chips and computers—operating at speeds way beyond current electronic models—may be on the horizon. Otis Po



OLITICS

WOOLING MINIVAN MOMS

Politicians think they could
be the key to Election 2000

Almost any politician could win Maryann R. Gallagher's vote with this promise: more hours in the day. Every morning at 6 a.m., the Vienna (Va.) mother of three flies out the door and into her Plymouth Voyager for the 30-minute, jam-packed commute to her job reviewing vaccine advertising material for the Food & Drug Administration. At 3:30 p.m., she's back in the left lane of Washington's Beltway, doing 70 mph to race home in time to take her daughter to soccer.

Gallagher, 49, then speeds off to the market, whips together dinner, and picks up her children if her husband, Frank, can't get away from his job as a manager at GEICO Corp. After dinner, she'll start the laundry and field calls as a school fund-raiser. If any of her kids has trouble with his or her braces, she says she feels like a "crazy woman." As if that's not enough, she frequently drives to Pennsylvania to visit her aging mother, worrying along the way about college and nursing-home costs.

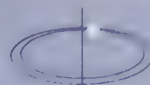
Sound familiar? Chances are you know someone just like this. And politicians from both sides of the aisle have these millions of Maryann Gallaghers and their frazzled lives on their Election 2000 radar, aware that they could very well be a deciding factor. Call them the "Minivan Moms," the college-educated women who commute to work from their suburban homes. Like Gallagher, they were often Democrats in their youth but have grown more conservative as their focus has switched to schools and their children's values. They're slightly grayer and a little more tired than the Soccer Moms of

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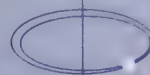


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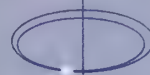
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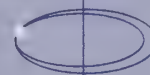
Fall, 1996. Dr. Ulrich Schumacher named CEO of Siemens Semiconductors.



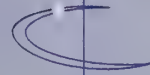
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1996, but they share a major trait: While suburban men are a likely GOP vote, these women are politically independent now—the precious “swing voters” both parties covet.

In 1992, President Clinton sailed into the White House by tapping into the financial insecurities of recession-weary voters. By promising family leave and increases in education funding, he became the first Democratic Presidential candidate to capture the suburbs in nearly 30 years. Today, as anxiety over job security and eroding wages recedes, Presidential can-

Both Democrats and Republicans agree there is a problem but their solutions differ. Democrats are looking to government to ease the burden. Gore, for instance, is offering a basketful of options, from an expansion of federal family leave policies to programs to ease rush-hour traffic jams and suburban sprawl. Democratic rival Bill Bradley also intends to make the issue a central one in his campaign, but aides say he has not yet developed a specific agenda.

Republicans are divided. Most GOP leaders reflexively

GO TEAM!

Gallagher's son heads off to football practice

pose new government programs to ease business mandates. Front-runner Texas Governor George W. Bush is stressing broad tax relief

he says will give families greater choice in structuring their schedules because the restored income will allow them to cut back hours. But some of his GOP brethren question that approach. GOP pollster Christine Matthews thinks Republicans are looking as if they are ignoring the stresses of middle-class life if they don't come up with some specific, targeted ideas. “The Democrats are way ahead of us on this,” she says.

STRESSED OUT. That's not good news for Republicans. Suburban moms are feeling increasingly stressed. A survey last year by Democratic pollster Celinda Lake found that two-thirds of workers felt time pressures, and that three-fourths believed the government should do more (table). Lake says that June, 1999, polls, to be published, found that families felt the work-life squeeze even more intensely.

Lake also found that suburban men with young children increasingly are responding the same way as working women when polled about time-crunch issues—another worry for Republicans who have previously had a lock on suburban men. As Lake notes a merging of concerns among all suburban women. Within six to eight years ago, lower-income women said they would have preferred extra money over extra time; they're now saying they want the

extra time—just like college-educated women.

Now, politicians of every persuasion want to prove they feel these women's pain. First out of the gate is Gore. As he attempts to recreate Clinton's suburban success, Gore is honing a message designed to appeal to the harried middle class. And he's feeling some political urgency. Despite the historical gender gap that favors Democrats, polls indicate that women prefer Republicans Bush and former Transportation Secretary Elizabeth H. Dole over Gore in hypothetical general-election match-ups. Independent women voters, in particular, tell pollsters that they want a change in the White House after years of Clinton Administration scandals. And



Families to the Pols: Help!

Poll of 1,115 adults on Jan. 28 – Feb. 1, 1998

	WOMEN	MEN
Are time pressures on working families getting better or worse?	15% better 65% worse	18% better 63% worse
Should government do more to help working families?	74% more 21% not	70% more 28% not
Should employers do more?	90% more 6% not	89% more 8% not
Would you be more or less likely to vote for a member of Congress who favors expansion of the Family Medical Leave Act?	63% more 11% less	51% more 20% less

DATA: LAKE SOSIN SNELL PERRY & ASSOCIATES FOR THE NATIONAL PARTNERSHIP FOR WOMEN & FAMILIES

didates are starting to focus on another kind of middle-class squeeze: the quality-of-life issues that time-famished, two-earner households face as they struggle to balance work and family.

As they try to define a new set of middle-class needs, Presidential contenders from Vice-President Al Gore to publisher Steve Forbes are talking about the family time crunch. Today's middle-income parents are working about 260 more hours a year than they did a decade ago, according to the Economic Policy Institute. With time at a premium, messages relating to family life and “livability” are popping up on both parties' political agendas.

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Bush has a big lead over Gore when asked who would do a better job in protecting families.

Gore strategists are frustrated that his message isn't resonating, even though Gore has been holding annual powwows in Tennessee where he brings together work-family gurus to brainstorm new initiatives. Leading his family agenda is an expansion of the Family & Medical Leave Act to cover parent-teacher visits and routine medical appointments. He also wants to extend the law to small business. And he's pushing for a big infusion of afterschool-care funding. The White House also has proposed money to train child-care workers.

Gore's most obvious play for the time-pressed family is his *cri de guerre* against suburban sprawl. Traffic congestion eats into family time "so that a commuting parent often gets home too late to read a child a bedtime story," he laments. As part of his "livable communities" agenda, Gore is proposing more money for mass transit and mortgage subsidies for people who buy homes near it, an end to federal incentives that encourage new development, and new grants to states to preserve open space and farmland.

Critics joke that Gore is so focused on the small stuff, he could be running for national zoning commissioner. But his emphasis on family and work is one way to gain a foothold in the moral-values debate, where Republicans lead in polls, says William Galston, a University of Maryland professor who advises Gore. He adds that the GOP's Religious Right risks turning off these voters when they equate moral values with such issues as school prayer and abortion.

"TONE-DEAF." What's more,

Gore's ability to offer up a grab bag of micro-programs puts Republicans in a bind because of their philosophical opposition to them. "As good Republicans, we simply don't believe it's the job of the Commander-in-Chief to worry about commute time," says Republican pollster William McInturff, who is advising Senator John McCain's Presidential campaign. "As a consequence, Republicans occasionally seem tone-deaf. Any time you raise these issues, the Democrats can outbid you."

There's some common ground, though. To tap into growing concerns of two-earner families about finding ways to care for aging parents, the Vice-President and congressional Republicans are all talking up tax relief to help middle-income families pay for home-based elder care. And both Gore and Bush would like to see religious groups get federal funding to help with everything from Head Start to afterschool activities. This plank in Bush's "compassionate conservative" agenda, say strategists, shows a more humane Republicanism that is reconnecting with the socially-tolerant suburbs.

Republicans also eschew the kind of government role favored by Gore. Forbes notes, for instance, that a Gore pro-

posal to allow states to tap into their unemployment compensation funds to start paying for family leave could jeopardize the security of those funds. But advocates of the proposals argue that more than half of the state-run funds have surpluses because of the tight labor markets.

Instead of government plans, Republicans are pushing massive tax relief, arguing that families know best how to use the money. A centerpiece of their \$792 billion tax cut approved by Congress in August would reduce the "marriage penalty," which taxes many two-earner families at a higher rate than if they were singles filing separate returns. "Most of these issues are best refereed inside of families and not by the government," says Indianapolis Mayor Steven L. Smith, Bush's chief domestic policy adviser. "The broader the tax cut, the better it is for family policy."

Promises, Promises

What the candidates are saying they'll do for working families

GEORGE W. BUSH Permit religious organizations to get federal funds to provide social programs, including afterschool care

ELIZABETH DOLE Allow women who return to the workforce after caring for children to contribute extra tax-favored money into retirement plans

STEVE FORBES A "flat tax" that would free up enough money for two-earner families to either cut back working hours or allow one parent to stay home

AL GORE Expansion of existing federal family-leave policies; TV V-chip to help parents screen out objectionable programs when they're not home; measures to reduce traffic congestion

DAN QUAYLE Change federal overtime laws to allow employees who work extra hours to take off compensatory time rather than earn mandatory overtime pay

JOHN MCCAIN Reduction in "marriage penalty" so two-earner families keep more of their income; expanding tax-favored savings accounts for education

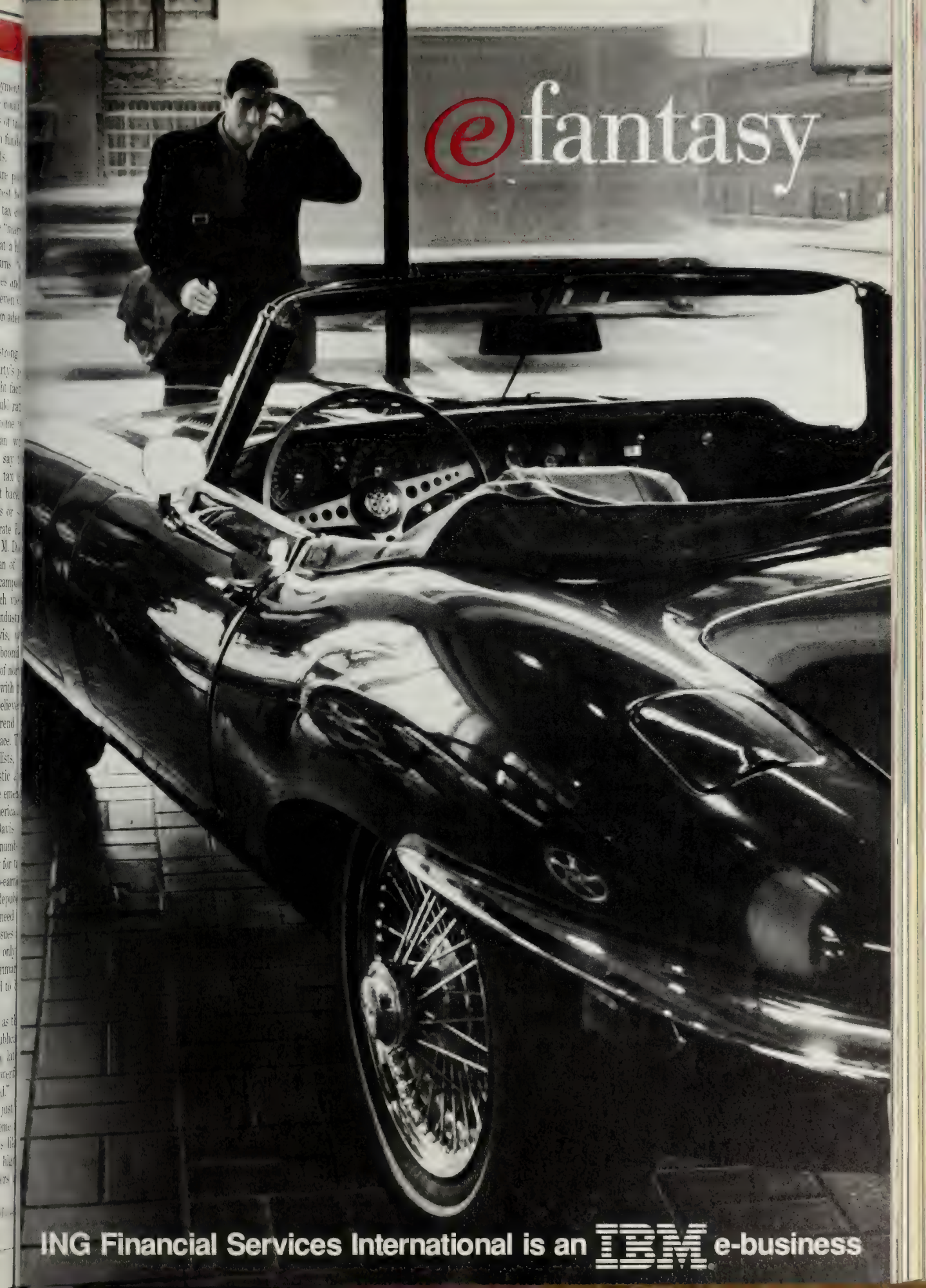
That view finds strong support among the party's powerful Religious Right faction, many of whom would rather have women stay home with their children than work. Some Republicans say they'd like extra money from tax cuts to let moms cut back their working hours or stay at home. But moderate Representative Thomas M. Davis (R-Va.), chairman of the House Republican campaign committee, says such views are a relic of the Industrial Era. Although Davis, who represents the booming Washington suburbs of northern Virginia, agrees with the tax cut, he doesn't believe it will reverse the trend of women in the workplace. "The views of party moralists," says, "are not realistic and are dissonant with the emerging swing vote in America."

EASING BURDENS. Davis is among the growing number of GOP officials pushing for incentives to help meet the financial burdens of two-earner families, such as child-care costs. However, most Republican Presidential candidates aren't yet convinced they need to expend the same amount of political capital on these issues as the Democrats. The reason: Working moms make up only a small percentage of the GOP base. "In a Republican primary, the majority of voters are male, and the women tend to be pro-family traditionalists," says one party activist.

But expect Minivan Moms to become a bigger focus as the primary season shifts to the general campaign. Republican pollster Matthews, though, worries that may be too late. "The Democrats have identified an important and powerful message," she says. "Our leaders don't seem interested."

With demand at the grassroots building, it may be just a matter of time before the time squeeze is a common theme in the Presidential campaign. That means that parents like Maryann Gallagher, their pedal to the metal on the highways of America, could find themselves crucial players in the national political drama about to unfold.

By Susan B. Garland, with Richard S. Dunham in Washington



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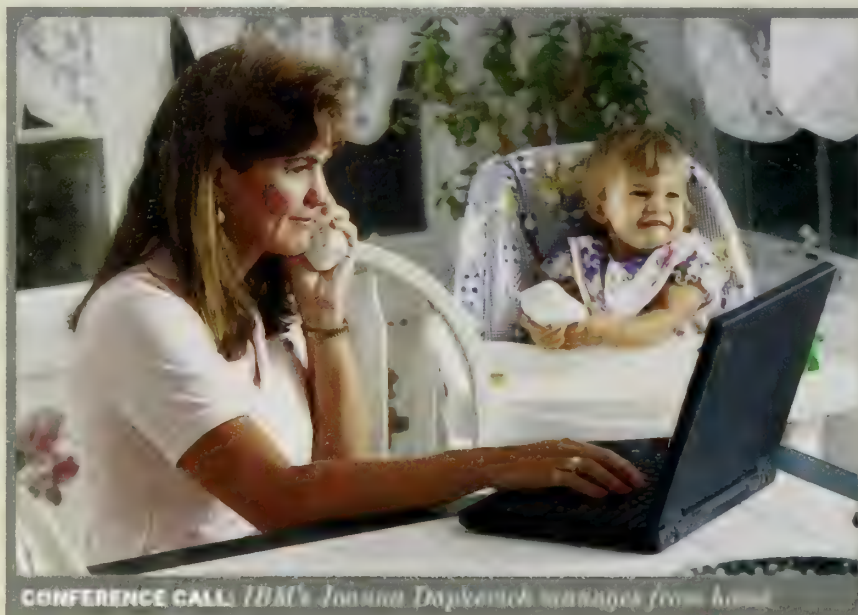
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COMMENTARY

By Michelle Conlin

9 TO 5 ISN'T WORKING ANYMORE



CONFERENCE CALLS IBM's Joanna Dapkevich manages from home.

For all the country's New Economy ways, most jobs are still modeled on the clock-punching culture of the industrial past. Like wired-up assembly-line drones, people are expected to show up Monday through Friday and do their work in eight-, nine-, or ten-hour chunks of time. This rusty arrangement is exactly what IBM's vice-president of global workforce diversity, Ted Childs, wants to smash to pieces. Sounding like a corporate General Patton, Childs warns: "We're going to grab that old model by the throat and choke it to death."

That's strong talk for a human resources executive. But Childs is waging a difficult campaign. So far, most of Corporate America's response to the skin-tight labor market has been to lather job candidates with juicy options packages and perks. But there's fresh evidence that those companies are missing the boat. New studies, including one from the Boston College Center for Work & Family, find that most workers' No. 1 concern has nothing to do with getting free flying lessons or health insurance for their pets. It doesn't even have to do with chopping the hours they work or fattening their paychecks. Rather, employees' top priority is getting the flexibility to control their own time and when, how, and where they do their jobs—giving them the freedom to finesse their own work-life balance.

SPOOKED SHAREHOLDERS. Sounds easy. But that requires no less than rethinking and reengineering people's jobs. Called "work redesign," these projects often involve clipboard-toting consultants who nose around in every department, sometimes tearing apart people's routines for months. Plus, if word gets out that a company is in the midst of one of these mini-revolutions,

shareholders could get spooked. Some companies are so secretive about these projects that they won't talk about them even if they're going smoothly.

But a handful of savvy CEOs and human resource types like Childs are forthcoming about such workplace transformations. They're aiming to cure today's biggest human resource headache—retention of rising stars and would-be retirees—by rejiggering jobs so that workers' lives are a top priority, alongside customer expectations and the P&L. And by making things easier at home, these businesses are getting the worker loyalty and productivity and efficiency gains they sought all along.

Today at IBM, the company that was once so rigid that it banned flexibilities, managers are allowed to work part-time—and from home—so they can better juggle the demands of their children and their jobs. From a den in the family colonial, Joanna Dapkevich manages 50 software customer-service representatives at IBM's office park in Raleigh, N.C., 10 miles away.

After Dapkevich got pregnant in 1997, she asked her boss if she could work part-time from home but still keep her job. Accommodations had to be made. Since Dapkevich would only be working part-time, a third of her business had to be spun off to two other managers itching for more responsibility. And Dapkevich had to retrain her people to not think they were bothering her every time they phoned her at home.

Since her new schedule went into effect, Dapkevich's customer-satisfaction ratings have risen sharply, from



THE RECEIVING END: Dapkevich's troops are all ours

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New studies find that employees' top priority is gaining the flexibility to control their own time

80% to 85%. Her team's morale is also the highest of the four that make up her division. Says Dapkevich: "This way, I can give 120% to IBM and 120% to my newborn, and this nets out to zero guilt for me."

GUILT-FREE. Working parents at Merck & Co. are feeling a lot less guilty, too. A year ago, the Whitehouse Station (N.J.)-based company embarked on a massive work-redesign effort, asking employees what maddened them most about their jobs. People in the payroll department made big noises about the mounds of overtime that had become as habitual as coffee breaks. The pharmaceutical giant realized how much of the department's work wasn't computerized, and how the 9-to-5 workday didn't match

of employees who reported struggling with insomnia dropped by 35%.

The upsides aren't surprising, considering a recent study by Los Angeles-based Flexible Resources Inc., in which 56% of managers say employees with flexible schedules are more productive per hour. That kind of positive buzz is what has driven work redesign successes at such places as Ernst & Young, Hewlett-Packard, Bank of America, and Lucent Technologies.

But for all the demonstrated benefits of these changes, the majority of companies have yet to sign on. David Meador is vice-president and controller of DTE Energy Co. in Detroit, where he fought hard to implement what

he calls work redesign "interventions." Prior to his stint at DTE, he sweated just as much over pushing through work redesign changes at Chrysler Corp., where he was the controller of the Mopar parts division until 1997. At both companies, most employees were unhappy with their work-life balance. But their cultures did not allow the matter to be discussed, says Meador. "At first, executives said, 'it's not an issue here,' and 'we don't need it,'" he says. "This happened to be coming from white males who had worked 70 hours a week their whole lives. They didn't see it as a problem for them, so they didn't think it was a problem for anybody else." The face-time, company-first culture at DTE was so pervasive in the account and finance departments that people took vacation days when they were ill for fear that having sick days on their records would mar chances for promotions.

Meador set about changing this mindset in a work redesign pilot program launched this year. Gone is the hall-monitor atmosphere in which some workers felt they had to sneak out early even when they were legitimately owed time off. "Now, the focus is on whether we produce, not on how or where or when we do it," says DTE financial consultant Lisa Sexton-Garon.

Not long ago, DTE might have gone the way of the faddish fix-it: \$200 nights on the town and complimentary dry-cleaning pickups at employee cubicles. But a new generation of smart companies isn't hesitating to admit something's wrong and throw out the old playbook. These are essential moves for those corporations that don't want to be considered the crotchety holdovers of another work-life age.

Michelle Contin writes about workplace trends from New York.

Struggling To Balance Work and Family

A look at what's easing the burden for working parents—and what's falling short.

WHAT'S WORKING

INDEPENDENT CONTRACTING

One in four workers is saying adios to Corporate America. And what a happy lot: They are twice as likely as W-2s to earn more than \$75,000 per year and half as likely to work more than 40 hours a week.

FLEXIBILITY At the end of the day, workers care more about having control over when, where, and how they work than anything else. Flextime, telecommuting, and part-time work arrangements are employee favorites.

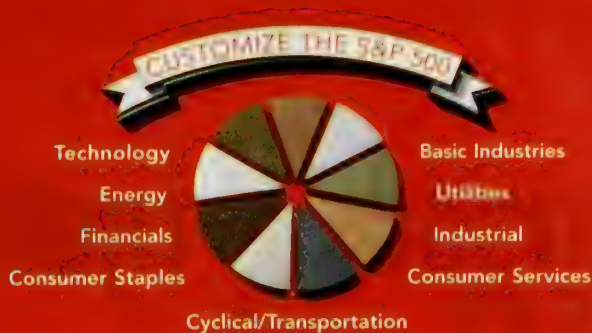
WHAT'S NOT

CHILD CARE Corporations have spent monumental sums of money to help provide child-care arrangements for working parents. But companies say they can't afford to foot the bill by themselves, and they're getting little, if any, government support.

THE FAMILY LEAVE ACT Only a smidgen of workers are taking advantage of a policy that allows employees to take up to six months off without pay after the birth of a child or when a family member takes ill. The problem: Who can afford it?

the cyclical pileup of work. Automation and new schedules helped sink department overtime 50% and allowed the number of people with flexible work arrangements to double, to 45%.

The benefits of work redesign have even shown up in some unlikely places—like the bedroom. After moving 200 bankers from pricey downtown Boston office space to cheaper digs in Framingham, Mass., Fleet Financial Group got pounded with a raft of complaints about longer commutes, smaller support staff, and a focus on pumping out as many loans as possible instead of providing quality and customer service. With the help of researchers from Radcliffe's Public Policy Institute, telecommuting options were offered. A new backlog manager was hired to handle the overload, and officers were allowed to swap loans with each other. It didn't take long for the bad feelings to die down. The number



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FROM NABISCO TO TROPICANA TO... EFDX?

Brand-marketing whiz Ellen Marram faces her biggest challenge yet

Ellen R. Marram has always liked to go her own way. When she graduated from Wellesley College in 1968, many of her classmates were too busy embroidering flowers on their jeans and preaching free love to think much about their futures. But Marram donned a suit and marched straight over to Harvard business school, one of few women of that era to do so. And in the three decades since, she has become one of the highest-ranking and most visible women in Corporate America. Yet after becoming the CEO of Tropicana Beverage Group in 1993, Marram quit a year ago when the company was sold, brashly announcing that she was leaving to devote herself full time to searching for a CEO job.

Now, Marram, 52, has resurfaced—and she's surprising everyone once again. With her stellar credentials, which include heading Nabisco Biscuit Co. and turning Tropicana into a global juice-industry leader, many figured Marram would become one of a handful of women to head a large U.S. corporation. Instead, she has settled on a tiny Internet startup called efdx. Never heard of it? Join the crowd. It stands for electronic food and drink exchange, an idea that Marram insists will revolutionize the way everything from grocery chains to restaurants do business.

FROM SCRATCH. It's a huge gamble for Marram—and in many ways, a big come-down. She has traded thousands of employees for a team of six at efdx's Stamford (Conn.) headquarters and a staff of 200 scattered around the globe. Instead of a massive global brand, she's hawking a name that sounds like some obscure software product. But that's not how Marram sees it. She says she was excited by the idea of efdx and wanted the chance to build something from the ground up.

She'll certainly have that. Today, food exchanges exist for only a limited number of food commodities, such as coffee and soybeans. For everything else, informal networks of buyers and sellers



MARRAM AT EFDX' NEW OFFICES IN STAMFORD, CONN.

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have evolved over time. What efdex proposes is to create a broad, superefficient exchange for every type of food imaginable, with thousands of customers trolling the Net to find the best deals on everything from tiny shipments of pricey Italian truffles to massive quantities of hamburger meat.

Marram is courting restaurants, retailers, and food manufacturers such as McDonald's Corp. and Campbell Soup Co. on the buyers' side. She also wants to recruit everyone from individual farmers to multinational conglomerates to list their foodstuffs on the exchange. Efdex, which got its start in Great Britain, will debut in Europe next month before a scheduled U.S. rollout in early 2000. It plans to make money charging for advertising and commissions on trades

and by selling proprietary industry data on such things as prices or supplies. "This could be very big," says Nomi Ghez, a Goldman, Sachs & Co. food-industry analyst. "Ellen is getting involved for a reason."

Described by former co-workers as

smart, demanding, and sometimes confused with subordinates, Marram is the unlikeliest of Net entrepreneurs. Conservatively dressed in a crisp navy suit accented with small gold earrings, she sports a look far more at home in a corporate boardroom than among the

sipping, khaki-clad Xers who typify the world of Web startup. And though her clearly adds cloud the tiny company doesn't guarantee success. For starters, many of others are trying to launch similar services. What's more, it's unclear whether the food-and-beverage industry will embrace efdex as their preferred way to business.

Even assuming efdex is viable, is it a good fit for Marram? She made her mark as a consumer-product whiz, but efdex is positioning itself as

Ellen R. Marram

BORN Boston, 1947

EDUCATION Wellesley College, BA, economics, 1968; Harvard B-school, MBA, 1970

FIRST JOB Library clerk in high school: "The joke was you needed a library card to take me out."

NEW JOB CEO of startup efdex, an online wholesale food-and-beverage exchange.

PREVIOUS JOB Chief exec of Seagram's Tropicana unit, which was sold to PepsiCo in 1998.

MOST POTENT SKILL An intuitive marketer, she is known for her ability invent new prod-

ucts, such as SnackWell, that strike a chord with consumers.

MANAGEMENT STYLE Demanding. "I'm not always as patient as I should be."

ENERGY LEVEL High. Known to sneak in late-night sightseeing on foreign trips after colleagues head to bed.

HOBBIES Traveling, especially in Eastern Europe and Asia; reading biographies, history, or mystery novels.

FAMILY Married, with two grown stepchildren and a three-month-old grandchild.

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ess-to-business company with little interaction with consumers. That raised some eyebrows. "I don't see this plays to her consumer strengths," says an executive who has worked closely with Marram. "Maybe it'll grow big enough to hold her interest, but I think her talents are being wasted." Adds Terry L. Preskar, a former Nabisco colleague who is now vice president of health management at McK-Medco Managed Care: "I was a bit surprised when I found out."

STAGED SPIN-OFF. Marram insists she didn't want to take a job where "they were asking me to do again what I'd done before." Her path to efdex began with Seagram, Tropicana's parent, sold its juice division to PepsiCo Inc. in August 1998. Seagram had been planning to spin off Tropicana into an independent public company, and many observers expected Marram to stay on as CEO. When that didn't happen, Marram says she was "a little disappointed." Others insist her reaction went deeper. "She was absolutely crushed," says one Tropicana insider. Adds a headhunter who has closely followed Marram's career: "Her biggest disappointment in life was not having that IPO." Marram says she supported the sale. "It was the best thing for Tropicana. It just wasn't the best fit for me," she adds. "I didn't have

Efdex stands for electronic food and drink exchange—a Net marketplace that Marram insists will change how the food industry operates

the necessary enthusiasm to stick around."

In any event, Marram quit not long after the deal was announced, and for the first time in three decades, she was without a job. Few doubted that she would soon find work. The wide expectation was that she would land a top corporate job within weeks or months. "Pepsi could have been a port in the storm while Ellen looked for something else," says Steven A. Seiden, an executive recruiter and president of Seiden Krieger Associates Inc. "She had the guts to say no."

Instead, she jumped onto a roller-coaster ride of endless breakfast and lunch meetings. But the weeks and months rolled by. She was considered for the post of Levi Strauss & Co.'s chief operating officer and for other jobs. But while she was sought after for her consumer-products expertise, a major CEO slot that appealed to her didn't materialize. Some recruiters say her star power started to fade a bit. Says one: "It's hard

to be out of the market for that long."

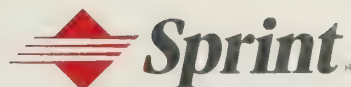
Finally, in April, Marram got the phone call that propelled her into the world of E-business. Brian M. Meany, a recruiter at headhunter Herbert Mines Associates, knew of her reputation as a driven brand-marketing star when he called about a tiny Net startup that was looking to hire top management. Marram cut him off 60 seconds into his spiel. "O.K., I get it," he recalls her saying. "Now, I've got some questions for you." In a five-hour meeting at New York's Peninsula Hotel, Marram quizzed efdex Chairman Tim C. Carron Brown on details of the business model and how much control she would have over shaping the company.

EXPANDED REACH. At first, efdex's business-to-business plan didn't seem to lend itself to Marram's brand-building skills. But as she listened, she became intrigued by the idea of a global electronic business exchange that could radically expand the reach of food-and-beverage trading while making it more efficient. And Marram,



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along with the rest of the world, couldn't help notice as one Net entrepreneur after another racked up paper fortunes in the tens of millions. Still, she waves off any suggestion that she's out to make a quick killing in efdex's IPO.

Will efdex turn out to be the blockbuster Marram hopes to build? If not, no one will be more disappointed than Marram. Raised in a middle-class household in Boston, Marram was Type A right from the start. Her father, who ran a men's clothing store before going to work for the post office, would quiz her on politics and news at the dinner table. Marram's mother, a homemaker trained as a teacher and psychiatric social worker, stressed the value of school. Says Marram: "I was expected to achieve."

RIDICULE—AND SUCCESS. And she did. Excelling in high school, Marram won a scholarship to Wellesley. There she developed a passion for economics, because it let her "read the newspaper more intelligently," and psychology, which helped her understand behavior. She tried to combine the two by canvassing blood donors for a paper on why people give. "Some felt it cost them nothing, and others felt they were giv-

Is efdex a good fit for Marram? She has made her mark as a consumer-products whiz, but efdex is a business-to-business company

ing life," says Marram. "It taught me that how people value things can differ a lot."

After Harvard B-school, Marram landed at Lever Brothers and two years later jumped to Johnson & Johnson's Personal Products Co. She switched to Standard Brands Inc. in 1977, which was acquired by Nabisco. In 1987, Marram broke into the big time when she took over as president of Nabisco Grocery Div. A year later, she became president and CEO of Nabisco Biscuit Co., where she came up with the idea of a low-fat brand of cookies and snacks. Nabisco veterans ridiculed the idea, informing her that indulgent snacks and low fat don't mix. Marram pressed ahead and developed the SnackWell brand. Launched in 1992, the brand became huge hit.

At Tropicana, she met with similar resistance—and success. The result: Tropicana was the first in the industry to ap-

ply sophisticated brand segmentation to orange juice. Grapefruit-splashed orange juice, juice with pulp, with extra pulp—these are all on the grocery shelves thanks largely to Marram. On her way to the top, Marram developed a reputation as a demanding boss. "She was highly regarded," says Preskar of Marram's Nabisco days. "But she also intimidated some people. She kept the line. She asked the tough questions."

Now, Marram will be asking more of the same at efdex. Transforming a muscle Net venture into a moneymaking global exchange is a huge proposition. With her small staff and unproven business model, it won't be easy. On the other hand, this is the woman who gave the world a low-fat cookie that actually tastes good. Compared to that, building a new company from the ground up could turn out to be a cinch.

By Diane Brady in Stamford, Conn.



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STRATEGIES

FIXING RUBBERMAID IS NO SNAP

Newell's stodgy turnaround effort has investors upset

When Newell Co. announced a blockbuster \$6 billion deal to buy Rubbermaid Inc. last October, Wall Street analysts and big investors barely batted an eye. Sure, it was pricey. But Newell executives had earned their stripes turning around troubled houseware companies—more than 50 in the past decade. They call the process “Newellization”: clear out top management, send in the shock troops to fire people, sell or scrap unprofitable products, and consolidate distribution.

It was a formula that seemed to work without fail as Newell squeezed

profits out of a stable of brands it bought up including Levolor window blinds, Calphalon upscale cookware, Sanford pens and markers, and Rolodex card files. In an industry growing 3% to 5% a year, the Newell acquisition machine posted average sales growth of 13% and profit growth of 17% over the past 10 years. And fallen star Rubbermaid seemed primed to take Newellization to the next level. “This deal is bigger, but it’s not really different,” Newell Chief Executive John H. McDonough said in an interview last month.

Oh, really? Suddenly it looks like in-

McDONOUGH: *The CEO blames sluggish retail environment*

stead of Newellizing Rubbermaid, Newell is being Rubbermaided. On Sept. 1, the combined Newell Rubbermaid announced it would fall short of sales and earnings forecasts for the rest of this year. That came on the heels of previous quarters of missed targets and lowered expectations. McDonough has since been unavailable to talk further with BUSINESS WEEK, but in an uncharacteristically tense conference call with analysts, he blamed a sluggish retail environment for slower growth in several Newell product lines. But even Rubbermaid, whose lines include infant products and Little Tikes, has also proven much harder to turn around than expected when the deal closed in March. Its sales fell 7% in the second quarter, and they could sink 6% in the third, says A.G. Edwards and Stephen F. East. He adds: “There’s a lot of disappointed investors, and they’re waiting for another shoe to drop.”

Plenty have given up waiting. Newell’s stock fell 20%, to \$34, a few hours after its warning. It was already down from a high of 54½ in early 1998. That’s quite a comedown for a consumer-goods star whose stock returns in the ‘80s and ‘90s outpaced Standard & Poor’s 500-stock index by an annual average 30% vs. 19%.

Performance of that sort had long given Newell a far sexier profile on Wall Street than its humdrum brands would normally attract. But McDonough now faces a tough job getting Newell’s stock back. The 63-year-old executive worked as a Newell vice-president in the 1970s before moving on to found dental supply company Gendex Corp. He was rehired as CEO in January, 1998, when then-CEO William P. Sovey became chairman of a no-nonsense manager who operates out of a converted farmhouse near Freeport (Ill.) headquarters, McDonough bought eight companies in his first year in the corner office. That followed a tradition set by Daniel Ferguson, Newell CEO from 1965 through 1992, who first adopted the consolidation strategy. His goal: to expand the products Newell could offer up to merchandisers such as Kmart, Home Depot, and Wal-Mart.

TOP CANDIDATE. Newell’s management hasn’t shied from tough deals—it bought paintbrush maker EZ Painter in ‘72 after a bitter fight and lost a struggle for Stanley Works in ‘92. But the purchase of Rubbermaid was by far Newell’s biggest. The company had ‘98 revenue of \$2.5 billion, a size not that far off

ll Grize,
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Newell's own \$3.7 billion in sales.

Rubbermaid certainly looked like a top candidate for Newellization. For all its smarts in churning out well-designed products—molding plastic into efficient storage containers, sturdy baby carriages, and durable industrial products—Rubbermaid had become a basket case in actually making and delivering them. Despite numerous restructurings under former CEO Wolfgang R. Schmitt, Rubbermaid saw its operating profit margins slip from 16% to 5% in four years. And it brought in operating income of just \$131.8 million for 1998, compared with the \$534.1 million Newell earned.

"In a way, they were too innovative," says McDonough. "They thought their brand would carry them."

Rubbermaid paid a steep price for gumming up its customers' just-in-time delivery systems. Wal-Mart Stores Inc., frustrated with late and incomplete deliveries, cleared many of Rubbermaid's Little Tikes toys from its shelves, giving the space to Fisher Price Inc. products. Says Mike Maher, a Wal-Mart spokesman: "The issue [at Rubbermaid] has never been about the products themselves. It's been about getting those products into the hands of consumers."

After the merger was signed, McDo-

nough got a closer look at the sections in Rubbermaid's closet. According to Newell, Rubbermaid salespeople boosted orders by offering deep discounts. Now Newell management is having a tough time undoing the damage. It soothed some ruffled retailers, the company says, by lifting Rubbermaid's rate of on-time product delivery from a dismal 75% to 80% in

the 90s. But some retailers are balky at restocking inventories at higher prices. "Buyers are used to Rubbermaid throwing them deals," Barry Goggins, analyst at David Babson & Co., who bought 2.5 mil-

An expected \$80 million in new revenues now looks doubtful

Newell shares starting last year.

In cost-cutting, McDonough says Rubbermaid integration is on track. Analysts had expected Newell to squander \$270 million in annual savings by consolidating Rubbermaid's manufacturing and other operations. According to Newell, that process is well along. It cut 700 jobs at Rubbermaid, including Schmitt and his top managers, and scrapped a Little Tikes toy plant in Pennsylvania. But Wall Street also expects McDonough to add \$80 million so in new revenues as he smooths the transition. That now looks doubtful.

EXCESS BAGGAGE. Even more ominous, perhaps, the problems don't appear limited to Rubbermaid. Newell says non-Rubbermaid sales will grow only 1% to 2% in the third quarter. The half of Newell's 4% average annual internal growth rate over the past five years. Sales remain strong in areas like cookware and pens. But Newell's home hardware brands, Amerock and Brillog, are under pressure, in part because of the bankruptcy of a large customer, the Hechinger Co. home-improvement chain.

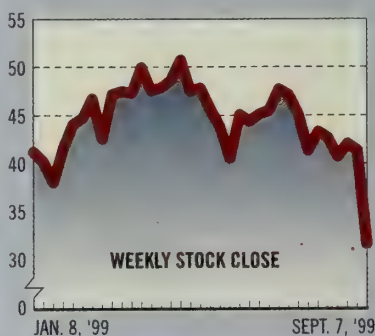
Anemic growth may force Newell to step up marketing, not one of its traditional strengths. McDonough hopes Newell will learn something about pumping up its brands from Rubbermaid. But don't expect him to wait long before jettisoning baggage. Last year McDonough sold the plastics division, Anchor Hocking glassware and the Start Hall Co. school supplies business because they weren't meeting profit targets. As the Newell acquisition engulfs sputters, its chief mechanic may have no choice but to pull over for a while and do some tinkering.

By Andrew Osterland in Chicago

AS NEWELL'S PROBLEMS MOUNT...

- ▶ Retailers balked at restocking Rubbermaid products
- ▶ Sales of non-Rubbermaid lines are hardly growing
- ▶ The company will miss earnings targets for all four quarters in '99

...INVESTORS LOSE FAITH



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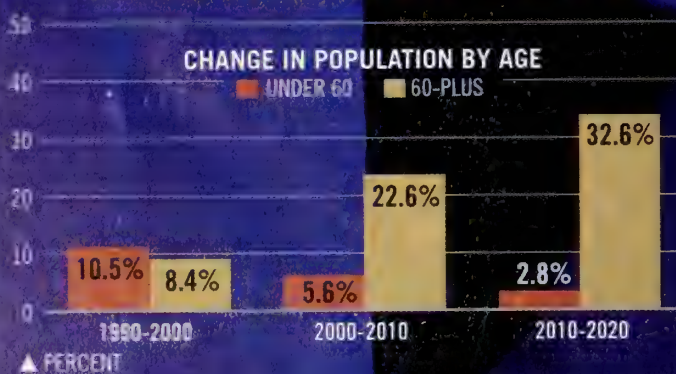
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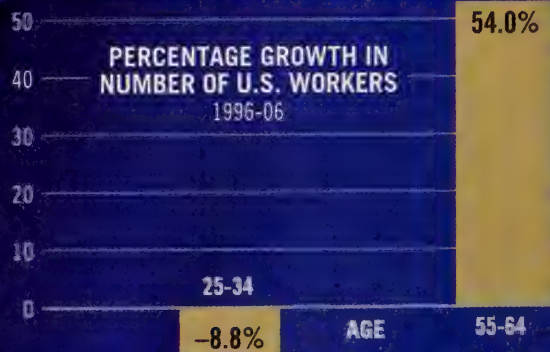
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BRAIN DRAIN

AS THE COUNTRY GETS GRAYER...



...AND THE WORKPLACE AGES...



DATA: U.S. CENSUS BUREAU, WATSON WYATT WORLDWIDE, BUREAU OF LABOR STATISTICS, DEVELOPMENT DIMENSIONS INTERNATIONAL

OGILVIE In Monsanto's Retiree Resource Corps, he now works "with real young people"

MIN

TALENT SHORTAGE GETS WORSE

GROWTH OF
MANAGERIAL JOBS

POPULATION AGE
35-50

'04

'08

'10

CHANGE FROM 1998

Older executives are set to leave the workplace in droves. Keeping these senior stars on the job will require more flexible management.

Are you ready?

Even amid today's lavish signing bonuses and perk-laden employment contracts, it's a sweet deal. Work anywhere in the world doing whatever you want whenever you want to. No, this is not the latest lure to attract Silicon Valley hotshots or Wall Street dealmeisters. It's Deloitte Consulting's bid to retain a group that until recently was being rushed out the door by Corporate America: executives over 50. Deloitte's Senior Leaders Program, an innovative plan aimed at its best senior partners, begins next June.

What's behind Deloitte's move? Simple demographics. In order to serve its far-flung clients, the consulting firm must maintain a standing army of highly skilled partners ready to fly to any city in the world at any time. But over the next five years, the number of Deloitte partners over 50 will double, to about 230—more than a quarter of the current total. In a grueling profession that attracts people with high pay and pensions that vest at 50, Deloitte knew that unless it moved fast, many of those partners would head straight for the exits. To

fight back, it's letting a select group of its brightest stars restructure their jobs almost any way they want, perhaps downshifting from full-time to part-time, or from consulting to mentoring. "We looked at the demographic risk of losing significant partners," says Douglas M. McCracken, Deloitte Consulting's managing director for the Americas. "The firm was vulnerable. We've been dealing with it."

Deloitte is facing a crisis that plenty of other companies are about to hit head on: an age-related brain drain. With the leading edge of the baby-boom generation nearing retirement and with a bull market that has left many rich enough to bail out early, Corporate America is heading for a massive talent crunch. Add to that what is already an acute shortage of smart managers, and we're looking at an epic struggle in the making. "There's a knowledge problem in organizations," says William C. Byham, president and chief executive of human-resources consultant Development Dimensions International. "All the history is going out the door."

GOODWILL MINISTERS. Already, other companies are moving decisively to hang on to their most experienced workers. Instead of severing contact when their top performers reach retirement age, they're finding ways to keep them engaged—and their own talent pool stocked. Companies such as Chevron, Prudential Insurance, and Monsanto are tailoring consulting contracts and part-time assignments to accommodate older workers. Some of those seniors are transferring wisdom and skills to younger colleagues. Others have been brought out of retirement to fill critical skill gaps temporarily or to circle the globe as ministers of corporate goodwill.

As more companies tap into this crucial resource, they'll be forced to grapple with a host of management issues, from lingering ageism to intergenerational conflict. They'll have to cre-

Cover Story

ate productive work teams made up of people of all ages, ambitions, and schedules. And as more people work past traditional retirement age, they will have to decide when an older worker is still vital and when he's punching the clock. Most of all, they'll have to find new ways to inspire their silver-haired stars. "If companies continue to require that working for them is an all-or-nothing proposition," says Dennis R.

Coleman, a principal at PricewaterhouseCoopers, "they will find people reaching

Cover Story

55 and going to work for competitors who are offering flexible employment opportunities."

What companies won't be able to do is simply avoid the issue. Plummeting birthrates have corresponded with the rise of the knowledge-based economy, which demands more and more white-collar workers. Between 1998 and 2010, the number of managerial jobs will rise by 21%, according to Development Dimensions International, while the number of people between 35 and 50 will fall by 5%. Already, the median age of the U.S. workforce is nearly 40, up from 34.9 in 1979. Even with productivity gains and immigration, there won't be enough people to meet the demand. "The pressure is building," says Ken Dychtwald, president and CEO of Age Wave, a business-development firm focusing on the over-50 set. "It's almost like geological plates, but it's demographic plates." The graying of America, he says, will alter everything from office furniture to the meaning of work itself.

Yet while some companies are learning to spin silver into gold, others are ignoring the shifts under way. "Most companies are not in enough pain yet," says Coleman. Indeed, until recently most companies thought there were too many people at the water cooler, not too few. The past decade has seen wave after wave of downsizing. And as high-tech businesses have begun to lead the economy, respect for wisdom has been squashed by the notion that the less history you know, the better. The 25-year-old director of development has become the norm at many Internet companies; the 55-year-old manager, a novelty.

In fact, until now, the workplace has been downright hostile for many older workers. Those downsizings hit this generation while they were in their prime working years, causing layoffs and career disruptions. Pink slips turned longtime loyalty into bitterness. And the culturewide emphasis on youth has only exacerbated the rampant ageism. "Older people in this culture have been discriminated against aggressively and continuously in the workforce," says Dychtwald.

SHORTHANDED. Yet thanks to the 17-year-old bull market, an awful lot of older managers don't have to put up with mistreatment. With their stock options and 401(k)s soaring in value, they're apt to walk away if conditions aren't ideal. Back in 1970, 83% of the men between 55 and 64 were still working, but only 66% of that group will be working in 2000, according to Douglas H. Powell, founder of consulting firm Powell & Wagner Associates.

One company that has a headstart on the issue is Chevron Corp. It recognized it had a problem three years ago. Falling oil prices had forced a series of downsizings, and a lot of the buyout packages went to Chevron's most experienced managers. It didn't hurt at first, says Barry D. Leskin, Chevron's general manager for learning and development. "We had so many within that band that we were able to downsize and still retain the expertise we needed," he says. "Now you see some cracks in that system."

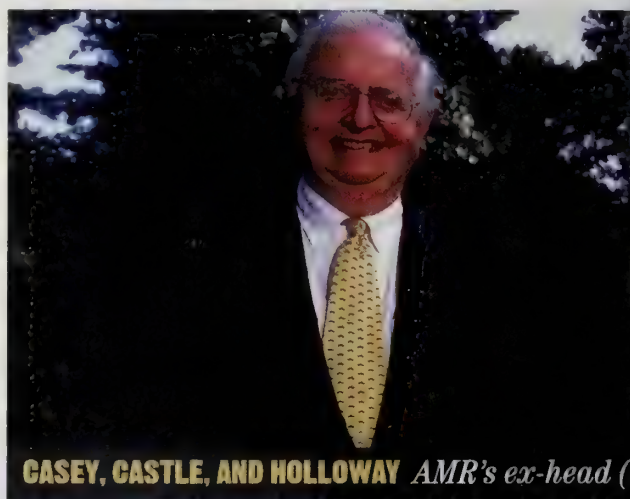
To make sure it's not caught shorthanded, Chevron has taken several steps. First, all operating units must conduct a demographic analysis each year to pinpoint where talent shortages will hit first. Succession planning is being ramped up to make sure qualified managers are in place when others

“

There's a treasure trove of talent being overlooked

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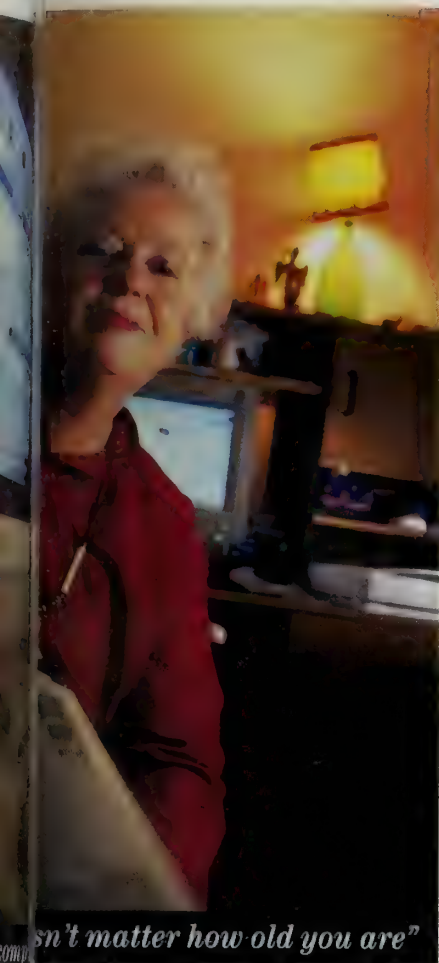
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CASEY, CASTLE, AND HOLLOWAY AMR's ex-head (

retire. And to build skills, Leskin is lowering the age which people are sent to executive programs.

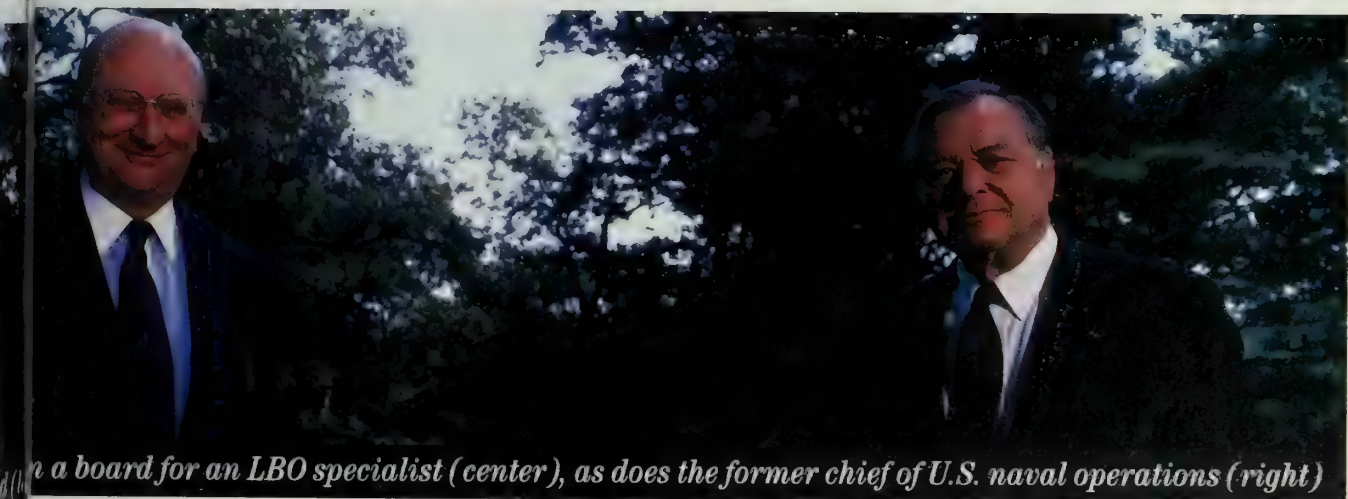
Just as important, Chevron is working hard to hang on to valued senior managers, such as Jesse B. Krider. On Aug. 30, retired after a distinguished career as a chemical engineer and executive. That same day, he boarded a plane for Chennai, India, where he spent a week as a consultant for Chevron, offering technical advice and assistance to the Cudalore refinery. Next he'll go to the Persian Gulf. "He brings 30 to 40 years of detailed technical expertise and experience that we just can't replace right now," says James N. Sullivan, Chevron's vice-chairman. Chevron plans to keep Krider on as a consultant as long as possible, and that suits him fine. "I don't want to play golf all the time, for God's sake,"



...n't matter how old you are"



KRIDER *"I don't want to play golf all the time, for God's sake"*



...n a board for an LBO specialist (center), as does the former chief of U.S. naval operations (right)

...and I feel a strong, strong allegiance to Chevron." Krider started preparing for his new role as part-time adviser long before his retirement date. Three years earlier, Chevron had asked him to make a job switch, from seeing domestic technology and operations to training younger execs. Besides filling a need for Chevron, it gave him a shot at something new. "If I had not gone into hiring and mentoring and helping others," says Krider, "there's a good chance that I would have retired earlier." What's the moral of the story? Flexibility pays. As some companies have learned through their experiences with working elders and others, retention means meeting your most valuable employees' needs. It's as true for the silver set as for any other. "It makes sense to think of [employees] as customers,"

says Lynn M. Martin, 59, former U.S. Labor Secretary under President George Bush and currently an adviser to Deloitte & Touche. "Companies that are going to need [these people] are talking about being customer- and market-friendly. Now they'll have to ask employees what they want."

MENTOR TRACK. Indeed, the rise of a senior workforce may turn notions of what constitutes a job upside down. Rather than defining a career as years of unbroken service with a discrete beginning and end, jobs may continue to evolve toward a more organic form, with periods of intense work punctuated by pauses for sabbaticals, maternity leaves, elder care, and personal health problems. Starting at age 50 or so, there may be a "bridge" period that could last from 5 years to 20, in which an employee slowly takes his foot off the gas

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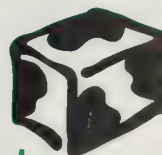
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pedal and moves from full-time work to full retirement. Those nearing retirement and no longer competing for the next gold star may decide they want a change—for example, moving from manager to mentor, as Krider did.

Deloitte is hoping that its Senior Leaders Program will make that kind of transition a lot easier. The constant travel and long hours required of a management consultant at a top-tier firm make early burnout an occupational hazard. With no middle ground, the firm risked losing its best to early retirement.

That's what almost happened to Daniel G. Gruber, now 52, a top consultant who had run himself into the ground. After 23 years at Deloitte, including several in which he traveled constantly, he decided to quit. His pension had vested,

FACING THE CRUNCH

Some companies are already using older workers to plug holes in their talent pool

DELOITTE CONSULTING Is launching a Senior Leaders Program to allow high-talent execs to redesign jobs rather than lose them to early retirement.

CHEVRON Conducts regular demographic audits to pinpoint skill shortages. Is developing programs to keep key managers longer.

MONSANTO, PRUDENTIAL Use retirees as temporary workers to do everything from sophisticated technical jobs to answering phones.

GE INFORMATION SERVICES Hires retired engineers to service older systems still in use.

CASTLE HARLAN The leveraged-buyout firm recruits retired top executives as board members and advisers for companies it invests in.



GRUBER Working three days a week and "doing the best consulting of my life"

Cover Story

and the travel had worn him out. "I just couldn't see a way out of it and still do the type of job they needed," says Gruber. After conferring with McCracken and Deloitte CEO Pat A. Loconto, Gruber agreed to stick around on a three-day-a-week basis, starting in June, 1997. While part-timers are common in other industries, the idea of a male consultant in his prime cutting back was radical. But more than two years later, Gruber is still going strong—and both he and Deloitte are reenergized. "I'm doing the best consulting of my life," he says. "[Part-time work] is an effective retention tool, and a wonderful transition to retirement."

DREAM JOBS. Learning in part from Gruber's experiences, McCracken and former senior partner Alexander R. Aird went on to create the Senior Leaders Program. If successful, it may be a model for other companies struggling to hang on to aging talent. Starting next June, several of Deloitte's best senior partners—generally over 50—will be given a chance to create their dream job. If they would like to focus half their time mentoring younger consultants and half with top clients, they can do that. If they want to run an office in Singapore, or head up a research project for the World Economic Forum in Davos, Switzerland, that's fine, too. "We want to bring these people into a process that says the opportunities for doing different and exciting things are within," says Aird, who himself might be used as a model. Although retired last year

at 62—Deloitte's mandatory retirement age—he still works under contract as a senior adviser. "I'm a young, vigorous, useful man, you see," he jokes.

Experiences like these show just how arbitrary mandatory retirement ages can be—and how much talent can be wasted. Otto von Bismarck chose 70 (later changed to 65) when he set up the first social security system in Germany some 100 years ago, in part because most people didn't live that long. Although a mandatory age has been outlawed for the rank and file, many corporate-governance experts have seized on age as the point when directors should step down, with the signing off at 65. While many execs remain vital beyond that age, the experts had reason to push for limits. Companies, people, need rejuvenation, and some board slots had become sinecures for directors who did more snoozing than managing. Still, a lot of wisdom is being thrown out with that bathwater.

John K. Castle, 58, chairman of leveraged-buyout firm Castle Harlan Inc. and a former head of Donaldson, Lufkin & Jenrette Inc., thinks he has found a way to gain good governance and still tap into a rich vein of executive talent. Castle targets just-retired CEOs and directors to serve on boards of the companies he buys. "We smile on those over 70," he says. "There's a treasure trove of talent being overlooked."



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looked." Castle looks for people with experience in the businesses he runs, such as retired Admiral James L. Holloway III, 77, formerly the chief of U.S. naval operations, who sits on the board of Castle's Statia Terminals Group, a petroleum-storage company. Castle tapped Albert V. Casey, 79, ex-head of AMR Corp., parent of American Airlines, to sit on two of Castle's boards—Worldwide Flight Services Inc., an airline-operations outsourcer, and, until it was sold, MAG Aerospace Industries Inc., a maker of airline sanitation systems.

This approach gives Castle an edge. He says he attracts folks who wouldn't have signed on in busier days. For retired execs, serving on Castle Harlan boards has another appeal—a limited time period. As an LBO shop, Castle sells off most companies after three to seven years so directors can move to another project. "That's attractive," says Frank Jungers, 74, former head of what is now Saudi Arabian Oil Co., who sits on Statia's board.

AGING WORKERS: SUDDENLY A HOT TOPIC

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BOOK/AUTHOR

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GENERATIONS AT WORK

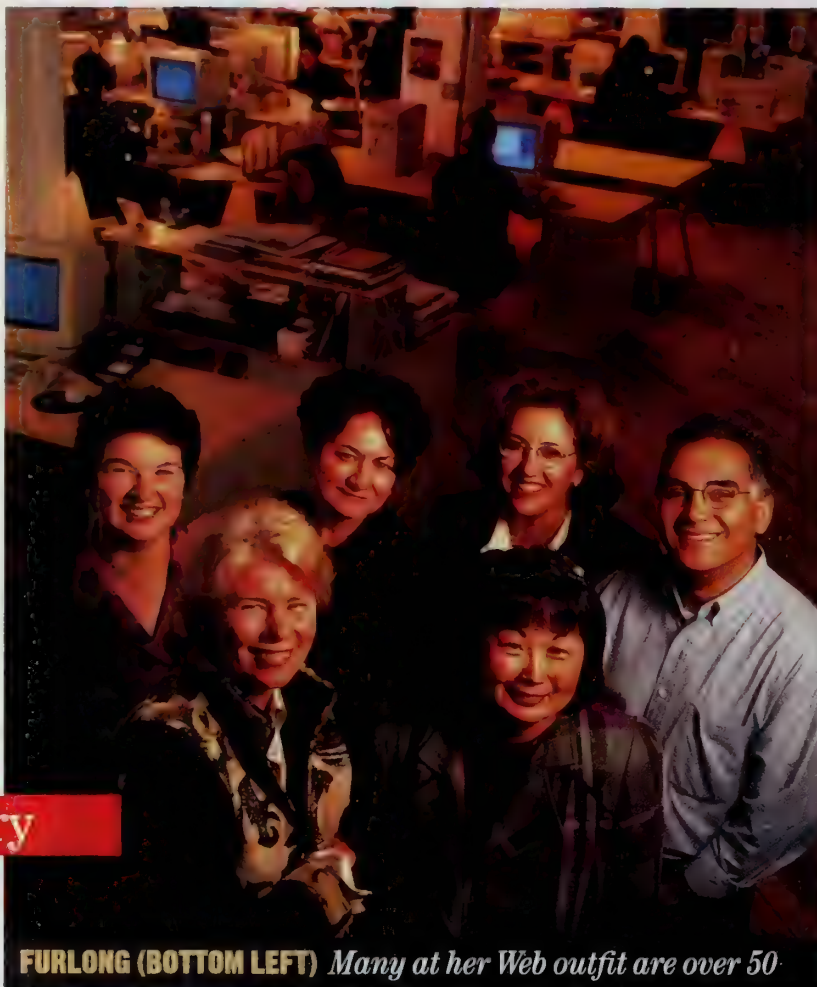
Zemke/Raines/Filipczak

Managing clashes between young and old at work

AGE WORKS

Goldberg

Companies must learn to attract and keep older workers



FURLONG (BOTTOM LEFT) Many at her Web outfit are over 50

Cover Story

Shorter terms also make it easier to ease out executives who have lost their edge. Indeed, as companies

employ older managers, they will have to deal with the sticky situation of an employee who can no longer contribute effectively. "The problem you have," says Thomas J. Neff, U.S. chairman of executive search firm Spencer Stuart, "is how do you decide which 70-year-old is worth keeping and which isn't?" Companies will also have to do better at succession planning. Older workers are generally intensely loyal, but illness and other problems can cause quick departures.

PRECIOUS ASSET. Oddly enough, one of the most experience-hungry industries has been the youth-centric computer-technology business. Older executives may not know Java or SAP, but they have something else the technology world can use—business experience. Many have been recruited as board members in Silicon Valley startups. Says Neff: "It's an enormous op-

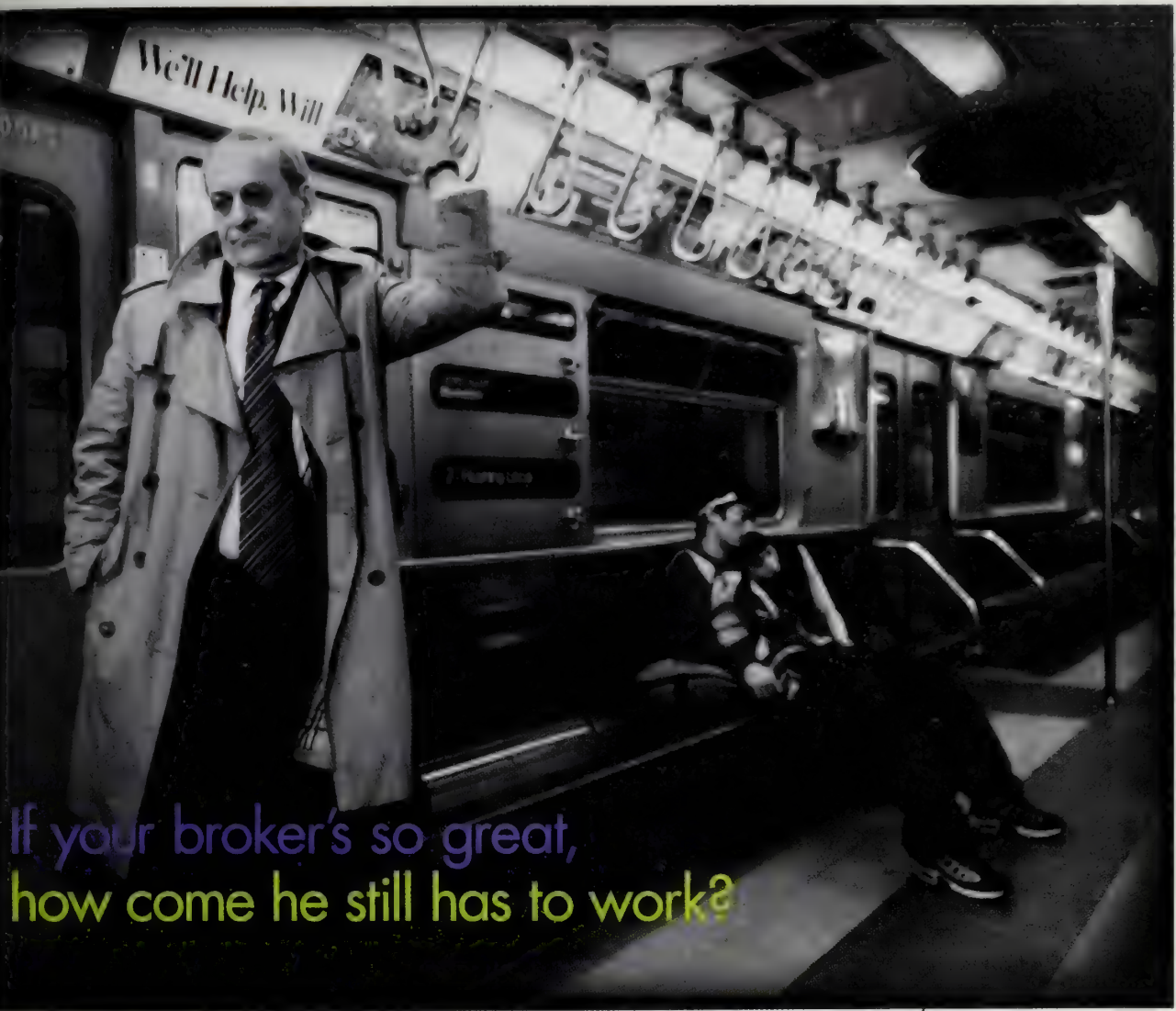
portunity for companies to take what is pretty much a wasted corporate resource." Roger A. Lillie, managing director of Boardroom Consultants, a corporate performance consulting firm, thinks the ideal person for new companies is "someone with maturity who can meet a youngish CEO."

Enter John M. Lillie, former CEO of Lillie Ltd. and Lucky Inc. and now president of investment firm Lillie & Associates. Lillie, 62, has found a new role as a mentor to companies both old and young. He sits on 13 boards, including three Valley startups: Branders.com, Lillie Corp., and NO Solutions—and provides "counsel on the business you hit as you go." Lillie, who says he loves his role, has a strong interest in recruiting and usually interviews people for key positions himself. "I think we'll see more of this type of activity for senior executives as they move into another phase of life—and they purposely don't say 'retirement,'" he says.

Already, a Lillie role is emerging in Silicon Valley for executives who have cashed out and have finished coping with the grind of work. "You're not expected to retire and go play golf," says Anthony W. Scott, managing director of the technology and E-business practice for A.T. Kearney Executive Search. "You're expected to get back in the game. Scott thinks this role could be modified for other types of companies.

It's already happening. Now cutting a swath through Corporate America is octogenarian Walter B. Wriston, who left Citicorp from 1967 to 1984. Ring his New York office, and he picks up the phone himself. "Yes, the dummy's still working," he laughs. Wriston serves on seven boards, including biotech companies Icos Corp. and Vion Pharmaceuticals Inc. "When you've been there and done that," he says, "you may have some useful experience for companies that are very young."

Whatever the industry, there are business problems to be solved, and that's where experience can be golden. Y



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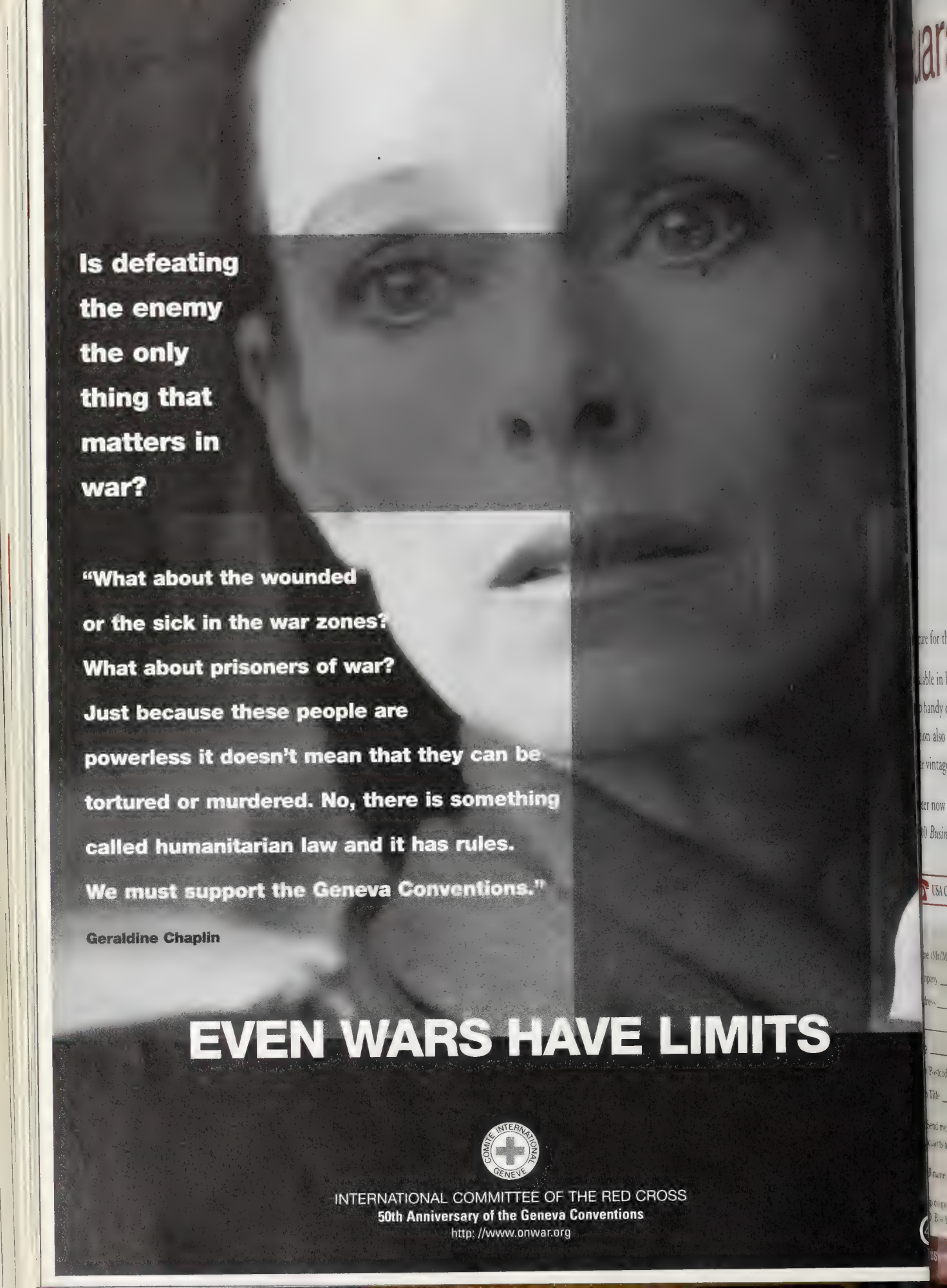
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What's the Atmosphere Like in Your Boardroom?





**Is defeating
the enemy
the only
thing that
matters in
war?**

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or the sick in the war zones?
What about prisoners of war?
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tortured or murdered. No, there is something
called humanitarian law and it has rules.**

We must support the Geneva Conventions."

Geraldine Chaplin

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technical challenges aren't off-limits, either. Surveys show that those over 55 are among the heaviest computer users and spend more time online than any other group. Sonia Brock, 62, the Webmaster at the Canada Ontario Business Service Center, is an example. Brock started as a secretary and taught herself Web design. Now she also has a Web business of her own. "That's the thing about computers," says Brock. "It doesn't matter how old you are."

Aging techies often seem as ready to learn the latest gizmos as kids fresh out of school. ThirdAge.com, a portal aimed at boomers and above, pulls more than 1 million visitors per month and has signed up some 10,000 folks for courses in online technology, says Mary S. Furlong, CEO of parent company ThirdAge Media Inc. in San Francisco. Furlong practices what she preaches: About one-fourth of her company's employees are both tech-savvy and over 50.

Sometimes it is precisely the older technology that seniors were reared on that makes them valuable.

FLEXIBLE RETIREMENT, INFLEXIBLE RULES

While government and corporate restrictions are loosening, older workers still face obstacles when it comes to collecting retirement benefits. Set it up wrong, and your pension could be at risk

QUIT FIRST To avoid having your company run afoul of labor laws—and your new flex job jeopardized—make sure you formally end full-time employment, especially if you're below retirement age. The new job must be different enough to avoid the perception that your employer is trying to duck paying benefits.

KNOW YOUR RETIREMENT PLAN Some plans offer a lump-sum distribution on retirement and allow you to come back to work without limitation. Other plans, however, may suspend payments if you work more than 40 hours a month.

DON'T COUNT ON A FULL PENSION If you take a part-time transition job as a lead-in to retirement, your pension may not kick in. And your monthly Social Security check could shrink if you're under age 65 and earn more than \$9,600 or are between 65 and 69 and earn more than \$15,500.

DATA: PRICEWATERHOUSECOOPERS, BUSINESS WEEK

69, worked years as a research chemist. An expert on federal regulations, he now works part-time in quality assurance, making sure that research reports meet government standards. "I get to work a lot of real young people, new products, new ideas," he says. "I don't have to go to the office to grind. I'm trying to get through the process."

Many retirees come back to work at the money but because they want to contribute. Their enthusiasm and loyalty are other advantages for talent-starved companies. That's what Prudential Insurance Company of America has learned. With a temp staffed by retirees, it also launched Retiree Offering Community Service, a group of some 200 volunteers who meet monthly to organize projects as food distribution and reading. Heading the Indianapolis crew is David L. Agee, 74, a marketing manager who helped start the program. "I was ready to wrap my arms around my wife and die," he says. Last year, Prudential's 60,000-plus employees derived 10% of its total volunteer hours from the program, a big boost for a company that relies on community relationships.

But dealing with older workers presents challenges to



AGEE Prudential's plan harnesses community volunteers

Cover Story

At General Electric Information Services, the E-commerce arm of the giant multinational, the eight-year-old Golden Opportunity program brings in retired engineers and specialists to help customers operating older systems.

LOYALTY. Other companies have also tapped older workers on a temporary basis to ease labor shortages. Monsanto Co. brings back retirees as temps or part-timers to fill gaps and save money. Last year alone, says Liz Thien, Monsanto's strategic sourcing manager, the Retiree Resource Corps saved Monsanto some \$600,000, primarily in overhead from agency fees. The Corps also helps Monsanto transfer its technical knowledge to younger people. James L. Ogilvie,

managers they report to. Although technically they be subordinates, seniors cannot be treated the same way as treat 30-year-olds. Conflict is even more likely to flare when you have part-timers working next to younger workers still burning the midnight oil. "We're going to have new models of how people work together, based more on merit and less on seniority," says Ed Michaels, rector at McKinsey & Co. "Fifty-eight-year-olds are going to have to be comfortable working in teams with 28-year-olds where [the younger people] are the team leaders." It

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INTERNETWORKING
POWERED BY 2.a.m

both ways: Peter F. Drucker, the 90-year-old author of *Management Challenges for the 21st Century*, thinks a new management style must be developed that treats older workers more as volunteers than as employees.

Cover Story

To make it all work, companies will have to face the problem of ageism, still a common aspect of many workplaces. The message boards at Third-Age.com are filled with frustrated over-50 folks who can't get hired. But the masses of aging baby boomers may have something to say about that—with a megaphone, says Dychtwald. "We are a belligerent, self-centered, and loudmouthed group,"

he says. "[Age-related] litigation will go through the roof." As the coming crush of elder workers transforms the workplace, the effects may be radical. Greater flexibility become the norm at all stages of a career. Indeed, things as bridge jobs may one day look tame. "At some point in time," says Edward F. Ryan, managing director of Executive Interim Management, which places CEOs and other high-level execs in short- and medium-term positions, "there will be a core of employees, and everyone else on a contractual basis." That's enough to give even the youngest manager a shock of gray hair.

By Jennifer Reingold in New York, with Diane Baumgardner in Greenwich, Conn.

IT AIN'T OVER WHEN IT'S OVER

As retirement looms, the rituals are familiar. Whether you're looking ahead to a voluntary departure—or, as happens all too often these days, are told to go—you collect the facts and figures on how golden a parachute your employer will be providing. Then you add in Social Security and your own nest egg, and compute what you'll have to live on.

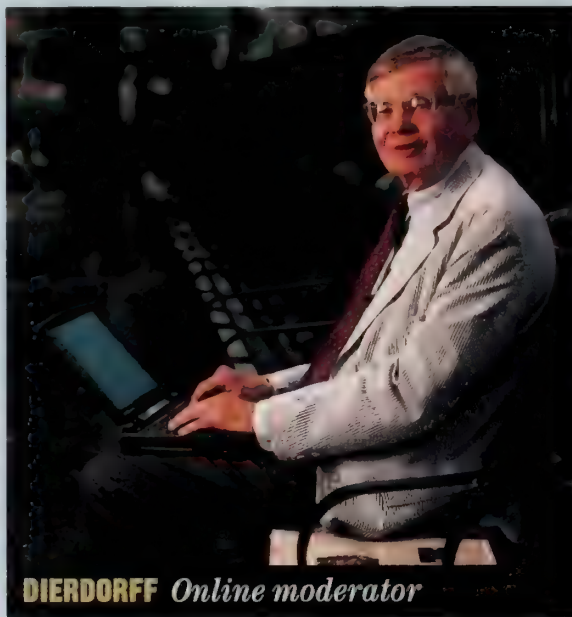
But money is far from the only source of anxiety. What to do with all that free time? With work so often the center of personal identity, and colleagues very much an alternate family, what of the sense of self? And how will home relationships bear up under being around the house much more of the time?

Predictably, I went through all these calculations. I was fortunate to have survived until my 65th birthday in a high-pressure job as the managing editor of *BUSINESS WEEK*. It was clearly time to move on, but to where? My termination package included a consulting deal, and I drew the assignment of exploring the potential of putting *BUSINESS WEEK* on one of the new online services.

SHEPHERD. The task wasn't all that alien. Although an English major who fancied himself primarily a wordsmith, I had 15 years earlier shepherded the magazine's transition from typewriters to computers. And in my early days at *BUSINESS WEEK*, in the late 1950s, I had edited a Special Report on the shift from vacuum tubes to transistors as the key element in computers.

In the first few months, I sat through one presentation after another from rival online services,

some of which never took off into cyber-orbit. Ultimately, it was America Online that most talked our language. As we geared up for launch, it became clear that posting the magazine online was only part of the opportunity. To reach an audience in a new way, I volunteered to become



DIERDORFF Online moderator

the concierge of the online message boards and the honcho for live interactive events. That, too, was an outgrowth of earlier experience as the moderator of a radio show and of dozens of the magazine's "dog and pony shows"—panels of *BUSINESS WEEK* editors appearing around the country.

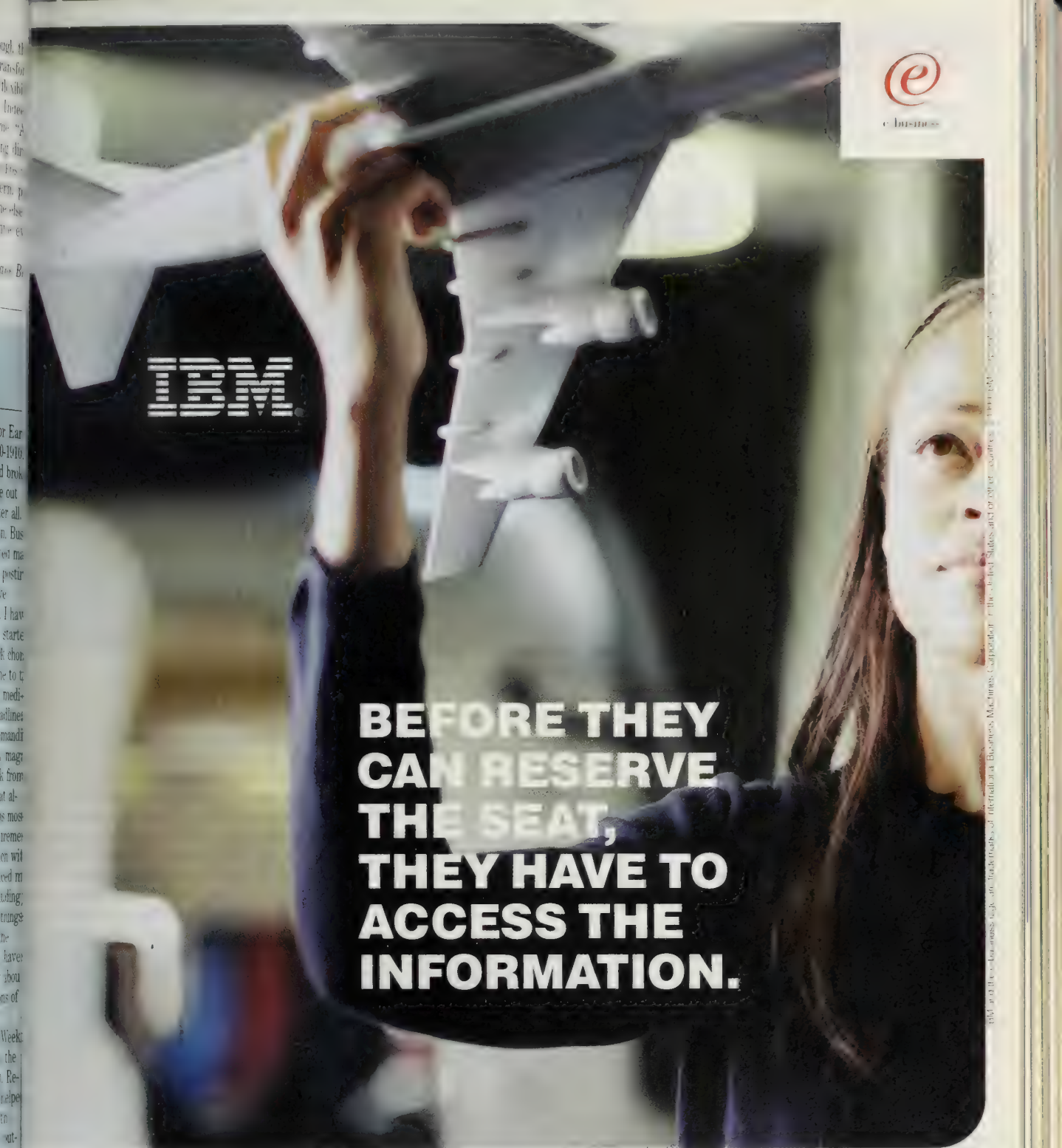
On Dec. 30, 1994, the requisite buttons were pushed, and Business Week Online made its debut. The launch team had worked for weeks preparing for this day. We huddled around a computer screen in great suspense. Five welcoming messages popped up rapid-fire from contacts at

AOL. Then, this: "Looking for Eastern American pattern glass 1850-1910." That broke the tension—and broke us all up. There were people out there at their computers after all. **TO THE FRONTIER.** Since then, Business Week Online has received millions of thousands of message-board postings

and done 600 or so live events, most of which I have moderated. What had started as almost a make-work chore ended up propelling me to the frontier of a vast new medium. There are still deadlines, but they're far less demanding than those at a weekly magazine. I can do the work from almost anywhere and at almost any time. Perhaps most important, my post-retirement job has kept me in touch with old friends and introduced me to many new ones, including a number of twentysomethings. They have taught me the latest technology; in return, I have taught them something about the history and traditions of the magazine.

Meantime, Business Week Online has expanded to the Web (www.businessweek.com). Recently we added video, and I helped anchor that effort. And, as with most retirees, there are those outside groups that beseech a retiree for help—in my case, a New York club and two performing-arts organizations. Plus, once or twice a year travel—most recently to Russia with a group of journalists. Will someone please tell me when "elderly" begins?

By Jack Dierdorff. Dierdorff, 71, is consulting editor of Business Week Online. He retired as managing editor of BUSINESS WEEK in 1993.



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BANKING

DIRTY MONEY GOES DIGITAL

Criminals tap into the high-speed world of wire transfers

In the annals of organized crime, money laundering once was hard work. Consider the plight of a typical 1980s Florida drug smuggler looking to move his money offshore. A boatload of marijuana could be sold on the street back then for \$20 million. But pot smokers paid in small bills, and the cash would weigh a ton and a half, says David L. McGee, a former federal prosecutor. Talk about heavy lifting. "You can't carry \$20 million in street cash in a pickup truck," McGee says.

The solution for drug dealers was called "smurfing." Smugglers would hire people—smurfs—to go to as many banks as possible and buy cashier's checks under \$10,000, the threshold for filing a government disclosure report. The smurfs would then fly the checks to an offshore bank and deposit them. From there, the money could be used or invested in ways to make the dealers look like legitimate businessmen.

What a difference a decade makes. Federal authorities are now investigating a case that makes the smurfs look like the cavemen of some criminal Stone Age. Russian racketeers are suspected of laundering up to \$10 billion through accounts at the Bank of New York. And all the Russians needed to do was switch on their personal computers.

Money laundering is taking a terrifying high-tech turn. Criminals sitting at keyboards are concealing their gains by mixing them with the trillions of dollars that swirl through the global banking system

every day. And slowing down the money launderers will almost certainly impose costs on banks and other legitimate businesses that benefit from rapid movements of money.

"There is no panacea available today," says Jerome Walker, a former federal banking regulator and now an attorney who specializes in money-laundering matters. "There is no silver bullet that will get you where you want to be."

CRUDE SCHEMES. Properly understood, money laundering is the final act of any financial crime—the real getaway, in which criminals hide the origins of their proceeds so they can be used. The key is moving money through as many bank accounts and countries as possible so it takes on the appearance of legitimate income. How this is done involves any number of variations—crude schemes from the past can coexist with the latest ruses. But the idea is to be able to claim that the boss is a legitimate businessman.

The problem facing law enforcement is that big criminals no longer use furtive couriers with fancy briefcases to move money. The staggering amount allegedly involved in the Bank of New York case suggest that Russian gangsters have advanced beyond street businesses like drugs or prostitution. The suspicion is they are diverting government or corporate funds—that is, money in its electronic form. Nor did the Russians even have to go on the streets to transport funds. They could initiate wire transfers

HOW TO WASH A MILLION DOLLARS

Using bank transfers, money-laundering mobsters can easily move cash across borders, swiftly turning dirty money into squeaky-clean greenbacks.



1 A Moscow gangster is sitting on millions of dollars. The cash came from a prostitution ring, legal income from several strip clubs that he controls, and funds that he has diverted from a government account. He wants to move the money overseas.

2 Using wire transfers and the gangster's underlings, the money is moved to a Russian bank, mixed with legitimate funds. They then use a Russian bank to wire the money to a lawyer representing a Miami real estate developer who is in cahoots with the Russian



SUSPICIOUS MOVEMENTS

Federal officials are investigating whether up to \$10 billion was laundered by Russian gangsters through the Bank of New York

the Financial Action Task Force on Money Laundering in Paris, which was set up by the leading industrial countries to combat the problem. "It's very easy for the launderer."

Compounding the problem is the staggering volume and velocity of wire transfers. More than \$2 trillion moves every day through the U.S., and globally the total is more than that. The Bank of New York says it handles \$600 billion in wire transfers every day. All this traffic makes it hard for human beings such as bank examiners and compliance officials to spot unusual action—even on the scale of the Russian case.

You need technology to fight technology. Software filters that enable banks to monitor wires for suspicious patterns of activity are being developed. But these filters are costly and could slow down transfers, punishing legitimate businesses. Banks, in turn, would have to sacrifice earnings to scrutinize wire traffic more thoroughly. And neither senior compliance officers at some big banks nor federal regulators are convinced that the results from more filtering justify the potential losses.

But the Russian episode may be a reason to start thinking more seriously about such responses. Money is pouring out of Russia. And while there's a debate about what kind of money is actually

wire transfers using bank software—standard stuff for business customers these days, but a potent weapon for money launderers.

Once plugged in, criminals can take advantage of the Achilles' heel in the battle against money laundering: the high-speed wire-transfer system. Money put in any bank anywhere in the world can be transferred just anywhere else in the blink of an eye. And criminal groups can execute wire transfers so quickly that law

enforcement authorities can't keep up.

In effect, the wire-transfer regime undercuts U.S. laws that require banks to "know their customer," that is, to know the customer's source of funds. In a transfer, the bank's customer often is another bank, acting on behalf of an account holder. If that first bank doesn't know its customer—or doesn't care to—the sky is the limit for the criminal. Wire transfers are "one of the most used techniques" for laundering money, says Patrick Moulette, executive secretary of



Russian bank sends instructions for a fund transfer to its "correspondent," a New York money-center bank that only knows that it is helping a Russian bank. The New York bank doesn't know the Russian customer is the Moscow mobster.

4 The New York bank arranges a funds transfer through its CHIPS interface computer. CHIPS debits the New York bank and credits the account in Miami. Like the New York bank, the Miami bank knows nothing about the actual source of the funds.

5 A U.S. associate of the Moscow mobster uses the cash to buy an office building at an inflated price. The realtor collects an outsized fee, which is legitimate income. And the Moscow mobster can say he's earning rental income from overseas.

The Canadian government estimates that up to \$1 trillion in criminal proceeds gets laundered every year

moving—one man's criminal proceeds are another's capital flight—there is a U.S. interest in making sure Russia isn't bled dry. Russia remains a nuclear power, after all. "This is a national security issue more than a banking issue," says House Banking Committee Chairman James A. Leach (R-Iowa), who will be holding hearings on whether International Monetary Fund loan money was diverted through the Bank of New York. "If Russia can't get itself together on the financial side, it could return to communism."

To be sure, money laundering hasn't become completely automated. Account officers—who are supposed to know the bank's customers—can make it easier for criminals to launder money through sins of omission or commission.

And so far, the Bank of New York has taken action against three employees. Two were fired, including Lucy Edwards, a Russian-born vice-president. Her husband is Peter Berlin, the director of Benex Worldwide Ltd., who set up the accounts being investigated. Natasha Gurfinkel Kogalovsky, who headed BONY's Eastern European business, is on leave.

She, too, is married to a Russian businessman: banker and oil executive Konstantin Kogalovsky, who once represented Russia in talks with the IMF. The Bank of New York is cooperating with the investigation, noting there have been no allegations of wrongdoing on its part. Attempts to reach the three employees and Berlin were unsuccessful.

DAISY CHAIN. But senior bankers and money laundering experts say the Bank of New York accounts could turn out to be just one stop in a daisy chain of accounts around the world through which suspicious Russian money moved. And that points up the difficulties that authorities are having in policing international money flows.

Currently, money is routed around the world via three major computer super-highways: Fedwire, in the U.S.; the Society for Worldwide Interbank Financial Telecommunication (SWIFT), overseas; and the Clearing House Interbank Payment Systems (CHIPS) in New York, for payments moving into and out of the U.S.

Together, these systems make it possible to conduct global commerce and

currency trading on a grand scale the underside of this efficiency is of supervision. CHIPS and SWIFT are private, while Fedwire is run by the Federal Reserve. And all three are regulated; you can think of them as bank clubs run on an honor system. At CHIPS, for example, a couple of leading banks handle the bulk of more than \$1 trillion a day in transfers, serving smaller banks, known as correspondents. Once a big bank decides to work with a smaller bank—in this case, say—it processes transfer requests more or less automatically.

However, big banks can have thousands of correspondents—the Bank of New York serves 2,300. And there is pressure to move quickly. If a bank doesn't process a correspondent's action by day's end, it can wind up incurring interest costs.

As a result, anonymous money moves easily through the global banking system. A Canadian government report estimates that up to \$1 trillion in criminal proceeds gets laundered every year, given the black hole of wire transfers no one can know for sure.

Handling these massive money movements, though, has become a key business for banks. In recent years, they have lost market share in any number of core areas as savers plow more money into stocks and nonbanks extend credit. But only a bank can handle payments and that leads to other opportunities: managing a company's cash, for example, a bank positions itself to do currency trades, even design derivatives for hedging. Yet those huge cash flows banks also attract individuals with intentions.

Cash processing has been a particularly important business at the Bank of New York. Fees from that business added up to \$256 million in 1998, up from the year before. And in its last annual report, the bank bragged: "In the last five years, we were the only bank to significantly increase our market share in the global cash processing business."

One way the bank expanded its cash processing income was by moving quickly into Russia. The bank began operating there in the early 1990s, working through its Swiss-based private bank joint venture—the Bank of New York International Bank of Geneva.

The Bank of New York, in turn,

A MONEY LAUNDERING PRIMER

Money laundering is easy to define: It's the process of making dirty funds appear to be clean. But the legal definition is narrower and more precise—and may not include the type of asset-stripping occurring in Russia.

The test: There are several federal laws designed to curb money laundering. But under the main

prove that these outfits "knew" the money was dirty since they played no role in the original crime.

Foreign crime: One problem with the money laundering laws is that they only cover the funds received from seven specific foreign crimes: drug trafficking, bank fraud, murder, kidnapping, robbery, extortion, and

mon•ey laun•der•ing (mə-nē län-dər-in) *v:* to make dirty funds appear clean

statute, prosecutors must prove that a suspect (1) knowingly, (2) took the financial proceeds of a crime, and (3) did hide the illegal origin of the money.

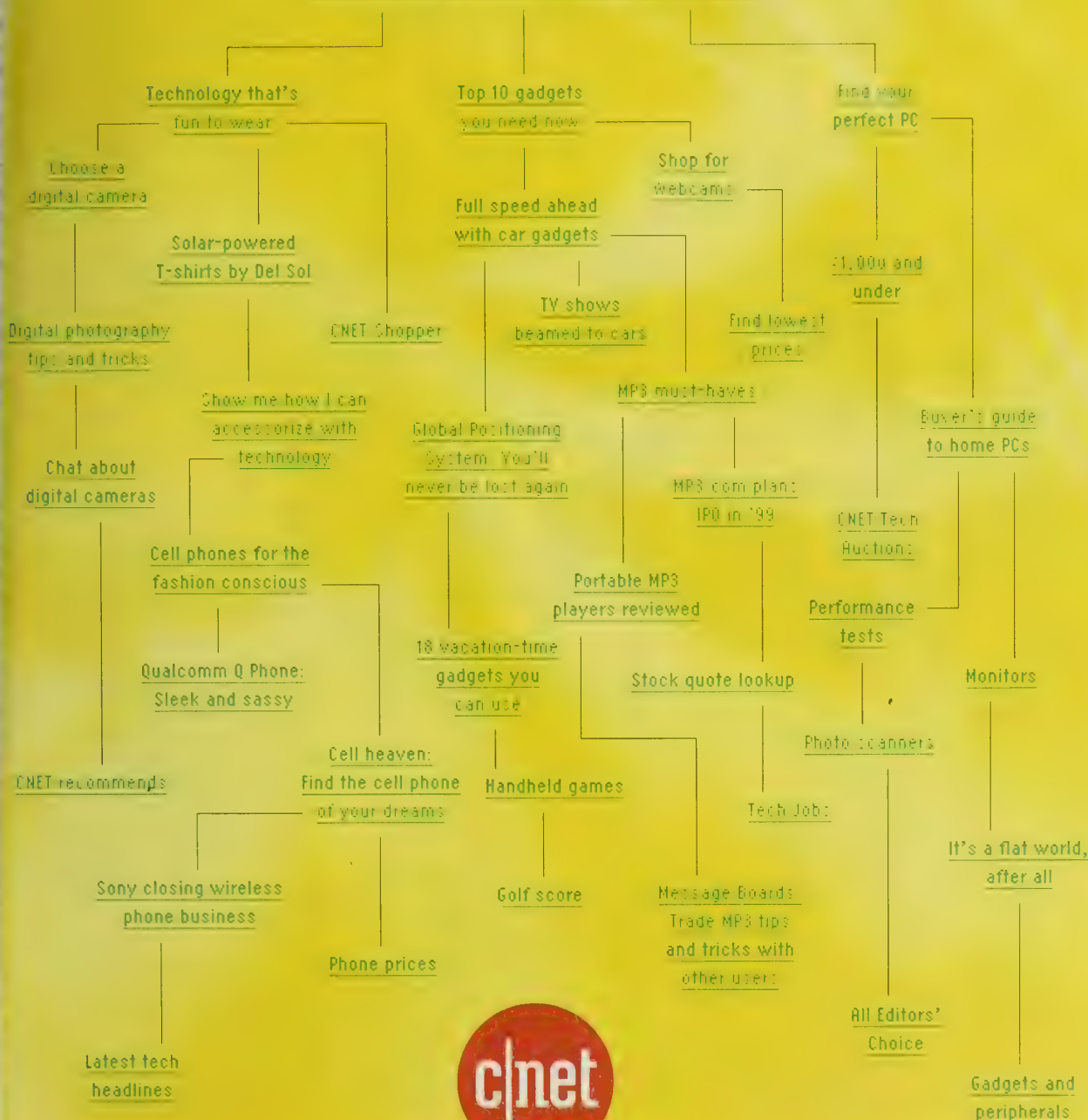
The loopholes: While that test sounds simple, it's often not so easy to meet in practice. For example, criminals frequently hand over their stolen funds to professional money launderers. It's hard for the feds to

the detonation of explosives. Any other illegal act that a criminal commits abroad—say, for example, stock fraud—can't be the basis for a money laundering conviction. Legislation to broaden the scope of the law to cover additional foreign crimes was shelved last year and is expected to be resubmitted to Congress later this year.

By Mike France in New York

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Bank of New York officials also helped its Russian business customers obtain the latest tools in computer banking

came one of the first foreign banks to set up correspondent relationships with Russian banks. One Russian bank, Inkombank, averaged more than 250 wire transfers a day with the Bank of New York. When Inkombank applied to set up a representative office in the U.S., Gurfinkel Kogalovsky, the now-suspended head of BONY's Eastern European business, wrote a letter of recommendation in 1996 to Federal Reserve Chairman Alan Greenspan. "Having worked with all the

friends in the fight against money-laundering—cash-sniffing dogs used at border crossings.

Small wonder, then, that bankers and law enforcement officials differ about the proper response to the latest high-tech money laundering schemes. "There is no doubt we could design a system that would be impenetrable to people who want to launder money, but I doubt the banks would stand for it," says Samuel D. Porteous, director of business intelli-

The case of suspected Russian money laundering seems to suggest software could help. In August, 1998, before the case broke, Republic Bank of New York filed a government report noting suspicious transfers from Russia—through Republic Bank of New York. Republic detected the activity a month after installing a filtering system. The Bank of New York declined comment on whether it had such software at the time.



top banks in Russia, there is no question that Inkombank is one of the most stable, sophisticated, and technologically advanced commercial banks in Russia," she wrote. Inkombank is now insolvent.

Bank of New York officials also helped its Russian business customers obtain the latest tools in computer banking. At least one of the accounts under investigation was equipped with a product that enables the account holder to transfer money, a government source says.

The quandary for banks is that each time they introduce a new service, they may inadvertently be helping money launderers. And it's a dilemma that will only deepen as technology develops. Indeed, the Financial Action Task Force on Money Laundering warned this year that criminals could begin using smart cards, online banking, and electronic cash to launder money.

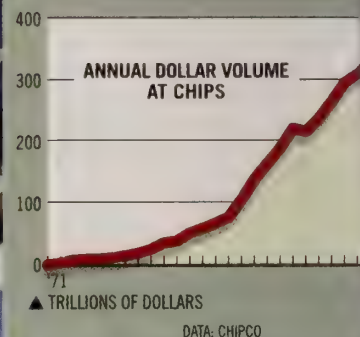
Just consider the potential threat from smart cards—which electronically store cash. They would enable criminals to move money in bulk without using banks at all. And because they are plastic, the cards might even elude one of man's best

defense: Kroll Associates Canada, the Canadian arm of the investigative firm. "It's a question of how much people want to spend."

There is precedent for action. Currently, banks use software that screens transfers to make sure they don't go directly to enemies of the U.S. The Treasury Dept.'s Office of Foreign Assets Control, or OFAC, prints a detailed list of countries, companies, and people that aren't allowed to receive wires. Banks have staffs that do nothing but monitor transfers to make sure money isn't being sent to the likes of Saddam Hussein or Slobodan Milosevic.

But there's a big difference between the OFAC list and a search for money launderers. The OFAC list requires banks to look for particular needles in the haystack of fund transfers. Detecting money laundering would require programs that would notice transfers exceeding amount or frequency parameters. Transfer messages are short and not particularly standardized. Computers could be faked out—and the result could be just reams of paper.

THE TRILLION-DOLLAR CLEARINGHOUSE



BANKS OWN THE CLEARING HOUSE FOR INTERBANK PAYMENT SYSTEM IN NEW YORK

But more monitoring would be a sell. This year, federal officials drafted proposed rules that would have required "know your customer" requirements after fierce protests. "We don't need laws and regulations," says John Byrne, senior counsel at the American Bankers Association. "The easiest thing to do is to overreact."

That raises the question of who the monitoring could be done at the computer highways that carry transfers over CHIPS, say. But again, that's unlikely. "If we took a role like that, we would be doing things for the IRS, trying to catch deadbeat dads, things like that," says George F. Thomas, senior vice president at CHIPS. "It's the bank's responsibility."

It should be someone's.

By Gary Silverman in New York, Margaret Coker in Moscow, Joseph Ber in Toronto, Laura Cohn in Washington, and Carol Matlack in Paris

For a Q&A with Russian banking kingpin Alexander Smolensky, see the Sept. 20 issue online at www.businessweek.com.

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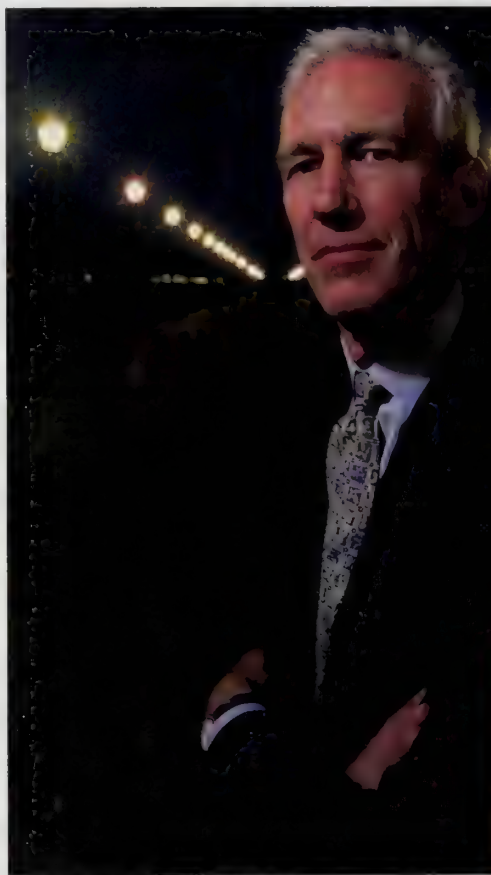
Bought for a song, RS Investment makes a comeback

Trying to sell a mutual-fund company during a stock-market meltdown is like hawking a beach-front cottage in a hurricane. That's the bind G. Randy Hecht was in a year ago when he sought a buyer for Robertson Stephens Investment Management, the firm he headed. Many fund companies looked, but not one made even a lowball offer. Hecht and other employees ended up buying the unit for a song from its owner, Bank of America Corp. Now it looks like Hecht got the deal, or perhaps the steal, of the year.

It wasn't just the stock market, blindsided by Russia's debt default and the collapse of Long-Term Capital Management, that scared off buyers. The biggest problem was the performance of its flagship, the Robertson Stephens Contrarian Fund. The mutual fund had been heavily marketed in the mid-1990s as a safe harbor in stormy times. But for the second time in two years the fund's value was melting down faster than the market itself. Contrarian had more than \$1 billion as recently as 1996, but a river of red ink and the resulting shareholder exodus had whittled it down to \$90 million by September of last year.

ROCK BOTTOM. "We were seen as damaged merchandise," says James L. Callinan, portfolio manager of RS Emerging Growth Fund. So last November, the Bank of America, which had acquired this unit through a megamerger, agreed to sell to Hecht and an employee group for \$20 million—about 1% of assets, a rock-bottom price as long as the asset erosion didn't worsen.

But as Hecht and the bankers were working out the details, the hurricane



DEALMAKER: CEO Hecht led an employee buyout when the firm drew no bidders

headed out to sea. The market bottomed early in the fourth quarter, and fund performance bounced back strongly. Five funds are up in excess of 40% so far this year, and all but two of the 10 funds are beating the Standard & Poor's 500-stock index. Cash started to flow back to the firm, mainly to Callinan's RS Emerging Growth Fund, the firm's leading performer this year.

Some cash is even starting to trickle into Contrarian, which is enjoying a bounceback, up 40.8%. Total assets under management—including separately managed accounts and hedge funds—now stand at \$4.5 billion, up from \$2.9 billion

at the end of February when it closed. Hecht estimates that the fund's performance rebound and asset growth will give the company a private market value of about \$160 million—based on average fund industry acquisitions prices in a range of 3% to 5% of assets.

Though Hecht is still chairman and CEO, there have been some significant changes since the buyout. Last November the firm renamed itself RS Investment Management (RSIM). The reason was the right to use the Robertson Stephens name for \$10 million. BankBoston Corp., which acquired its onetime parent, invested in bank Robertson Stephens from Bank of America.

Some portfolio managers have changed their status as well. E. Elijah left to set up his own fund but continues to manage RS Value + Growth and Information funds as a subadvisor. Rick B. hedge-fund specialist and co-founder of Contrarian, also started his own shop but retains a subadvisor arrangement. Still, because the firm is now employee-owned, it is easier to attract investment managers, says Larry Lieberman of The Group, a fund industry recruiting firm.

The firm needs to repair its reputation with investors, especially with independent investment advisers such as Michael Hengehold

RS's Returns Rebound

RS FUNDS	TOTAL RETURN*		
	1999**	1998	1997
CONTRARIAN	40.8%	-32.5%	-29%
DIVERSIFIED GROWTH	53.1	16.4	29%
EMERGING GROWTH	62.4	28.0	47%
GLOBAL NATURAL RESOURCES	41.6	-34.5	-17%
GLOBAL VALUE	1.3	10.6	N/A
INFORMATION AGE	47.0	52.2	6%
MICROCAP GROWTH	22.2	-0.6	30%
MIDCAP OPPORTUNITIES	23.3	11.8	22%
PARTNERS	7.0	27.3	18%
VALUE + GROWTH	11.2	27.4	13%

* Appreciation plus reinvestment of dividends and capital gains
** Through Sept. 7

DATA: MORNINGSTAR INC., RS INVESTMENT MANAGEMENT

of Hengehold Capital Management in Cincinnati who once flocked to RS funds. "I once had a lot of faith in Robertson Stephens," says Hengehold, talking about the portfolio manager of Contrarian and a founder of the investment bank. Hengehold put his client into the fund, whose concentrated positions in undervalued stocks and share sale positions gave it some traits of

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kstation
Reseller
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A vintage computer setup featuring a CRT monitor, a system unit, and a keyboard. The monitor is a large, dark CRT with a lighter rectangular area in the center. Below it is a small, dark system unit. In front of the system unit is a light-colored keyboard. The entire setup is on a dark surface.



interface. Windows NT services and advanced management features from Compaq ensure that industry-leading Compaq Deskpro products integrate seamlessly into your organization. Windows NT Workstation on Compaq Deskpro — it's the solution that's all business. For more information or to get Windows NT Workstation on a Compaq Deskpro, consult your Compaq Authorized Reseller or go to Compaq's Web site: **www.compaq.com**

hedge fund. When Contrarian started to slip in 1997, even as the market was rising, he held for about two months and then sold out.

Stephens plays a much-reduced role today. Last September, Hecht assigned Andrew Pilara, who runs other RS funds, and Barry to join Stephens as co-managers of what's now called The Contrarian Fund. Each runs about a third. The trio approach improved performance by diversifying what had become a concentrated fund, damping its volatility. A rebound in natural resource and energy prices and the surge in tech stocks bought on the cheap, such as Qualcomm Inc. and Apple Computer Inc., also helped.

Going forward, RS Emerging Growth

Fund may be more problematic. Standing at just over \$400 million at the start of the year, the fund is now \$1.2 billion, and size can slow performance. But Callinan, who joined the firm in 1996, insists size is not an issue. He says he ran far more money in his previous fund, Putnam OTC Emerging Growth. "When it went from \$885 million to \$2.6 billion, the fund was in the top 25% of its peer group, says Callinan. But the performance of RS Value + Growth, a hot fund in the early 1990s, has slowed in recent years as its assets grew and it evolved into a large-cap portfolio.

Even if the funds continue to hum, the firm needs better distribution. Most of its money has come—and gone—through mutual fund supermarkets such

as those run by Charles Schwab and Fidelity Investments. Hecht says the firm is getting inflows from Lynch & Co.'s mutual-fund wrap program, and he's also courting companies' wraps and 401(k) plans. The reason Hecht had sought a fund buyout was to gain new distribution channels, "but now I think we can do better on our own."

Whether RSIM has turned around enough to command the premium valuation of \$160 million is debatable. Hecht says the firm has no intention of putting itself on the block yet. Says Hecht: "Frankly, we're enjoying our independence."

By Jeffrey M. Laderman in New York with Louise Lee in San Francisco

CREDIT

BIG CARDS ON CAMPUS

Affinity-card issuers are stepping in with megabucks

You might say that Joseph E. Johnson, president emeritus of the University of Tennessee, thinks like any savvy chief executive officer. When the university hit what he called "a point of crisis" last year because of inadequate state fiscal support, Johnson forged one of the most lucrative corporate sponsor deals ever.

In a \$16 million arrangement with First USA, the credit-card division of Bank One Corp., the bank is the sole marketer of the university's Visa "affinity" credit card—a card adorned with the school's picture and logo—to the university's students and alumni. "A lot are concerned that we're soaking our students, but we decided to do this in a reputable way rather than to let just any issuer on campus to solicit. Plus we needed the funds," says Johnson, who retired last month. In addition to the \$16 million, divvied up over the course of seven years, the university receives 0.5% of every transaction charge, which could amount to an estimated \$4 million annually.

More colleges and universities face similar budgetary problems, and credit-card companies are rushing in to fill the gap. Card companies pay for

everything from mentoring programs to lecture series to cap-and-gown rentals.

"You're finding much more of a willingness for schools to cut all kinds of creative sweetheart deals with corporations for big money," says Lewis Mandell, dean of the State University of New York at Buffalo's management school and the author of three books on credit cards.

The deals obviously benefit

schools, but the real winners are the companies. Credit-hungry students often a card issuer's best customer, despite the fact that most don't have credit history or even a job. "It's the first card you get, chances are you'll hold on to it for a long time," says Robert B. McKinley, CEO of CardWeb.com Inc., a credit-card marketing service. Studies show that students keep their first credit card for an average of 15 years.

Card marketers also like students because 70% of those with cards at a year colleges have \$2,000 or more revolving debt, according to the Summer Federation. And ironically, students are less of a credit risk than the general population because parents often pay their bills.

TOO FAR? Once a bank sees a captive student audience, it markets other products such as mortgages, car loans, and, in a twist, debt-consolidation loans to students. credit-card



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"If you've got a card with your college on it, it's like being part of a club. There's pride involved"

debt. "They've got 'em and they know it," says Robert Manning, a sociology professor at Georgetown University and author of a recent study on students and credit cards.

Indeed, a growing concern is that affinity-card programs have encroached too far into academia's supposedly hallowed halls. At the University of Ottawa, MBNA Corp., the largest affinity-card issuer, started an alumni-student mentoring program last year. At the University of Hawaii, MBNA provides video production services and airtime to "ensure continuance" of the weekly *UH Today* radio and TV show. Says Manning: "You can't tell me

GEORGETOWN: MBNA
pays for rights to market its card there

that having a credit-card issuer controlling student media won't impact editorial decisions." Manning's Georgetown University gets paid an undisclosed sum by MBNA for rights to the Georgetown affinity card. Also, MBNA contributed \$2 million several years ago to fund what is officially called the MBNA Career Education Center.

"DANGEROUS." In the face of all of this, student credit-card debt is mounting, due primarily to aggressive card marketing and students' lack of credit knowledge. According to the Consumer Federation study, debt among college students has almost tripled since 1990. "That's why these mega credit-card deals are more dangerous than, say, whether a college chooses to be a Coke campus or a Pepsi campus or give all of its athletes Nike shoes," says Mandell.

Because of worry over student debt, a growing number of colleges and universities are restricting or banning campus-card marketing by non-affinity-card issuers. Still, most schools, especially large state schools, are not nearly as quick to turn down blockbuster affinity-card deals. "Colleges will say they've done a deal with a single issuer in order to get competing card marketers off

campus and to control the process. But what difference does it make if you're a student with \$10,000 of debt on an affinity card vs. another type of card?" asks Manning.

One of the reasons affinity cards have become so popular and lucrative for both colleges and credit-card issuers is that the cardholders are more loyal. "If you've got a card with your college on it, it's like being part of a club. There's pride involved," says McKinley. Part of that loyalty stems from the idea that

to student mailing lists and can be directly on campus," says Manning.

In a typical First USA or MBNA deal, for example, the bank is the issuer allowed to market on campus through student and alumni mailing lists—a coup for any card issuer in these days of cutthroat competition in the college market. At the University of Tennessee, for instance, there are 270,000 alumni and 26,000 students in addition to untold numbers of faculty who are also solicited at sporting



THE PLASTIC INVASION

SCHOOL	BANK	DEAL
GEORGETOWN UNIVERSITY	MBNA	\$2 million for career counseling center
MICHIGAN STATE UNIVERSITY	MBNA	\$5.5 million for athletic and academic scholarship program
UNIVERSITY OF HAWAII	MBNA	\$1.5 million for TV and radio shows; athletics
UNIVERSITY OF OTTAWA	MBNA	\$0.3 million for alumni mentoring program
UNIVERSITY OF TENNESSEE	First USA	\$16 million for athletic scholarships; other needs

DATA: BUSINESS WEEK

the cardholder is donating to his or her school or alma mater each time the card is used. In most affinity-card deals, in addition to an up-front flat fee sometimes as much as several million dollars, a college receives half of a percent of the purchase value of each transaction made with the card.

In addition, schools are often paid anywhere from \$5 to \$20 on each new account that is opened and sometimes a small percentage of loans outstanding. But card issuers emphasize that each deal they make is unique. "We make proposals to schools based on their particular needs and the information they give us," says Jeff Unkle, a First USA spokesman.

For their part, card issuers and schools often argue that affinity cards are tied to the alumni association, not the school itself, but this can be misleading. "In these deals, the contracts typically specify that issuers have access

Although schools and card companies are pleased with the deals, some critics are not. This spring, the Tennessee legislature nearly passed a bill that would have prohibited credit-card solicitations on campuses altogether, thus terminating the university's deal. The bill will be reintroduced next year. As part of the pending bankruptcy, Congress is considering a proposal that would allow credit cards to go to parents under 21 only if they have parental approval or are financially independent.

"We realize that students may not have credit experience, but most of them are extremely responsible and handle their credit cards as well or better than most adults," says Brian Dalphon, a spokesman for MBNA.

As affinity-card programs remain highly lucrative for both colleges and card companies, they will likely continue to remain BMOC—big money on campus.

By Marcia Vickers in New York

A SQUEEZE MINDSPRING

giants muscling into
ccess, even indies that
better service will have
end more to compete

Charles Brewer knows a good thing when he sees it. Take three-legged dogs, for instance. The CEO of MindSpring Enterprises Inc. has even used to his girlfriend's three-legged Rottweiler, Henri, tagging along with him to the Atlanta-based Internet provider he started five years ago when the couple broke up—and his visitation rights to Henri—adopted another three-legged dog, Louie. Today, Louie has his well-worn easy chair in Brewer's office, and between phone calls and meetings, gets a biscuit or a pat. Brewer shows the same dogged devotion to his customers. Inspired by his problems getting online six years

ago, Brewer has made customer service his mantra at MindSpring. It's a strategy that has enabled him to compete quite ably in the shadow of the Goliath of the industry, America Online Inc., which boasts more than 19 million subscribers. By encouraging his customer reps to spend as much time as necessary to make the caller happy, MindSpring has grown from a desk in Brewer's studio apartment to become the nation's fifth-largest ISP, with more than 1.2 million subscribers. "We've been able to compete because we please customers better," says Brewer, noting that 30% of new customers join based on a friend's recommendation.

FREEBIES. But a host of new competitive threats is raising thorny questions about the viability of the dozen or so large independent ISPs like MindSpring. PC makers Dell Computer Corp. and Gateway Inc. are locking up potential subscribers by bundling discounted Internet access with new PCs. On the low end,

upstarts such as NetZero Inc. and Free!.net. are offering cut-rate or even free access to those willing to wade through ads on their way to the Web. At the same time, cable and phone companies are starting to aggressively roll out high-speed Web access at a discounted price to customers of their other services.

Some analysts question whether the second-tier independents can survive. "The game is going to change dramatically," predicts Harry Fenik, vice-president for analysis at Zona Research Inc. in Redwood City, Calif. He believes the best prospect for these ISPs is that they'll be acquired by larger rivals, like AT&T or Microsoft Corp., that are looking to add customers. "The best day for these ISPs is the day the check is in the mail," says Fenik.

If the buyout offer doesn't come,

NO FRILLS, WITH LOVE

Brewer and his three-legged dog Louie. The CEO's desk is from a friend's attic, his chair from a garage sale



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what then? Analysts say the independents' best strategy is to develop valuable new services like hosting high-powered E-commerce. Just providing consumer Web access won't be enough. Investors are skeptical as well: MindSpring's stock has tumbled 58% since April, and the stocks of other publicly traded ISPs, such as Prodigy Communications, EarthLink Network, and OneMain.com, are down 52% to 64%.

Independent ISPs insist the threats are overblown. They say there always will be demand for Net access from companies that deliver it with strong customer service at a reasonable price. And they dismiss the notion that newcomers like Dell, Gateway, and other PC makers that just jumped into Net access can match them customer rep-for-rep. "It's like me saying I'm going to sell PCs from a Taiwanese manufacturer and do as good a job as they do," says Charles G. Betty, chief executive of EarthLink, which boasts 2,100 customer-service agents for its 1.4 million customers.

The independents also argue that without the high overhead of giants like AT&T, Microsoft, or the cable companies, they will always be able to compete aggressively. Typically, they charge consumers about \$19.95 a month—a couple of bucks cheaper than AOL and AT&T. MindSpring's Brewer prides himself on the company's lean-and-mean culture: His desk came from a friend's attic, and the armchair in his office was a freebie left over after a garage sale.

GROWING PAINS. Still, Brewer is having a hard time keeping his costs low and growing rapidly at the same time. MindSpring has spent \$310 million acquiring Sprynet, Netcom, and more than 40 other ISPs to achieve the scale it needs to compete with the big boys. But the Netcom deal meant reporting losses in each of the past two quarters—ending an impressive streak of five profitable quarters in an industry where profits are in short supply.

And even though MindSpring's \$150 cost for acquiring a new customer is lower than the \$400 that some ISPs spend, it still has trouble matching PC makers' low outlay. Campbell Angus, president of eisa.com, a Dallas-based PC maker that recently started bundling Internet service in the Dallas and Boston markets, says his only cost is the \$50 commission he pays retailers

for each new account they sell. "I think it would be very difficult for them to compete with that," says Angus.

Acquisitions have brought other problems, too. Customer churn, while still lower than the industry average of about 8% per month, edged up to nearly 5% per month in the first half from 3.3% last year. And technical difficulties with Netcom's E-mail service caused average wait times for callers seeking help to surge to seven minutes in July—more than twice the average for the first half. Brewer says the Netcom woes are behind him, and he has doubled the number

of employees in call centers this year to handle the increased support calls.

But that's an added expense—and it's clear that independent ISPs are going to have to open their wallets even wider to stay in the game. For one thing, they're investing to push into higher-margin businesses. MindSpring, for instance, provides dedicated lines for 3,000 business customers and hosts the Web operations of 55,000 customers.

Another big-ticket item for the independents: aggressive marketing. Earth-

Link recently began giving away digital video camera to anyone who signs up for 90 days of service. Labor Day, MindSpring unveiled its ever TV advertising campaign—the first piece of a \$90 million marketing campaign that is double last year's. It gets, virtually assuring that MindSpring will continue to lose money.

GUMP-TION. The quirky TV spots will air in as many as 26 cities during prime time, feature a Forrest Gump-like character sitting on a park bench with his dog, chatting up passersby about MindSpring's virtues. "I love the protagonist tells one story after another," says MindSpring spokesman. "MindSpring says that to me it's time. Not with those words, but that's what they're feeling."

But even memorable ads may not be enough to turn even an ISP as late as MindSpring—without the war chest of an AT&T or a Microsoft—into a household name. "MindSpring is starting a little late, and my fear is that they're going to have to increase spending to stay even," says FAC/Equities analyst Jeff Sadler.

If so, MindSpring may be left trailing along in the ISP market's second tier until one of the big players comes up.

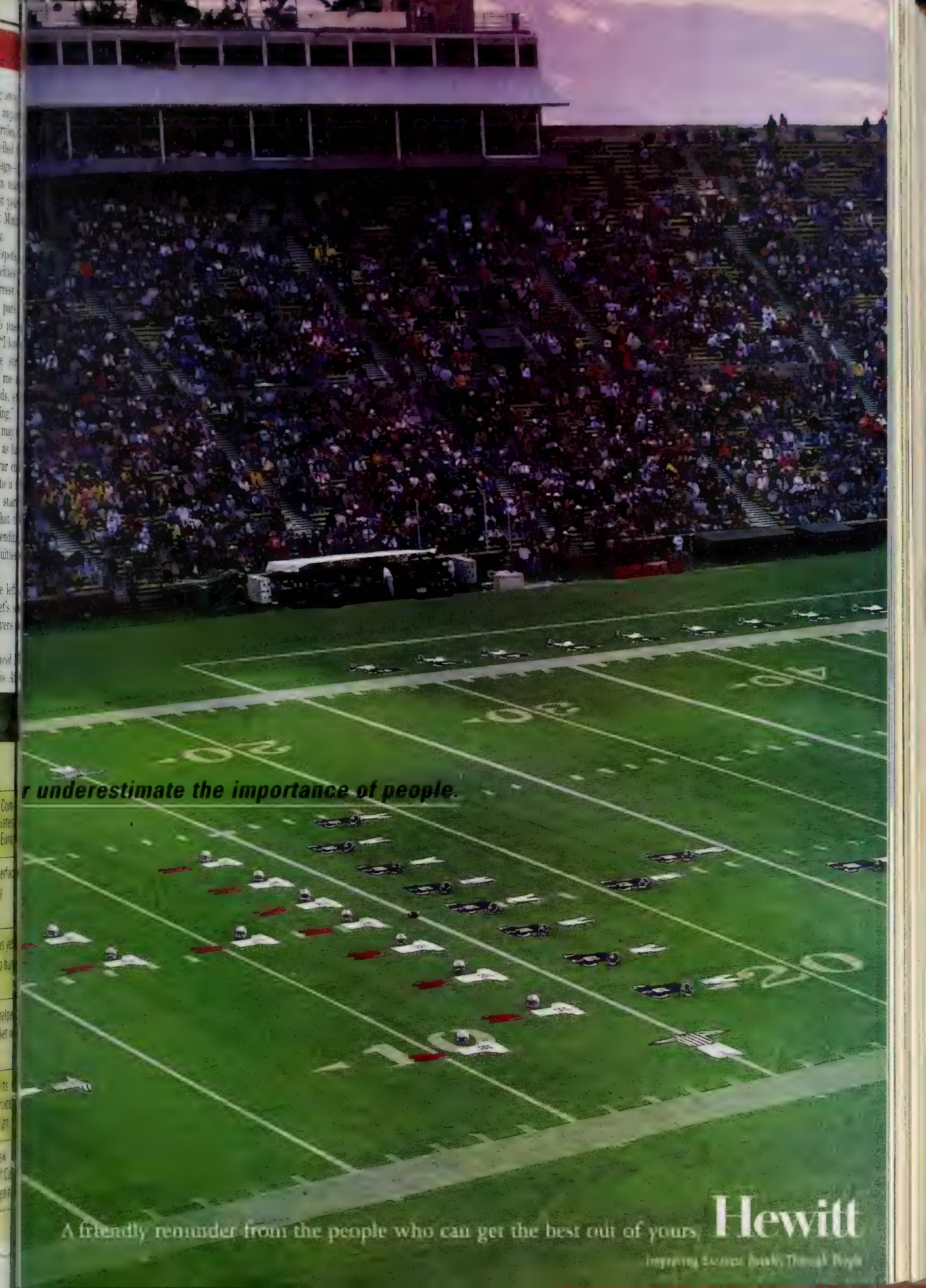
By Dean Foust and David
in Atlanta

Acquisitions, though necessary for growth, hurt service in the short run

How MindSpring Stacks Up

ISP	MEMBERS TODAY	MEMBERS MID-'98	STATUS
	MILLIONS	MILLIONS	
AOL	19.6	13.9	It's skillfully differentiating its AOL, CompuServe, and Netscape brands. The latest Netscape service is a freebie in Europe.
MSN	1.8	1.8	A cherished spot on the Windows interface hasn't paid off—yet. Look for it to buy another ISP to gain members.
AT&T WORLDNET	1.5	1.1	It has the golden brand, but AT&T has yet to take full advantage of its ability to bundle phone and ISP offerings.
EARTHLINK	1.4	.7	A close relationship with Sprint has helped, but EarthLink's agreement to co-market with Microworkz PCs flopped.
MINDSPRING	1.2	.4	The Atlanta company is sticking with its formula of providing top customer service. Plus, it's launching a huge ad campaign.
PRODIGY	1.1	.8	The online pioneer was fading until new management came on. Its purchase of Cal & Wireless' subscribers got it going again.

DATA: JUPITER COMMUNICATIONS, BUSINESS WEEK



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HOW TO
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Annuities That Won't Cause You Pain

Lower fees and better guarantees help meet investing needs

BY MIKE McNAMEE

Variable annuities are the stealth investment: Many own them, but few will admit to it. The insurance industry's answer to mutual funds, variable annuities get little respect. They largely deserve that fate. True, annuities allow you to delay taxes on your earnings. But in turn, you pay higher expenses, tie up your money longer, and complicate your retirement and estate planning. Worse, half of all annuities are sold to confused 401(k) and individual retirement account savers, who end up paying extra for a tax-deferred investment in an account that already postpones taxes.

To shed its bad reputation, the annuity industry is hitting the market with a raft of new products. Fees are falling, savers are getting new and cheaper ways of reclaiming the cash that they've invested, and insurers are offering better guarantees against investment disasters. "This market is finally coming around to consumerism," says Stanley Hargrave, a planner

and consultant at IMS/CPAS in Riverside,

These innovations improve the odds a variable annuity could serve as a useful addition to your retirement nest egg. But don't for your checkbook without a thorough analysis (table). You'll only want to consider an annuity if you've maxed out your other tax-deferred investments, such as 401(k)s and traditional IRAs. And you'll need to devote effort to taming the Rube Goldberg complexity of annuities' many parts. An annuity, warns account

James A. Shambo of Life Planning Concepts Inc. in Colorado Springs, Colo., is "a complex product that only

Insurance

people can use well."

FASTER GROWTH. A variable annuity is a life insurance policy wrapped around a set of mutual funds. The mutual funds, called "subaccounts," resemble the choices you'd get from a fund company, ranging from stock indexes to money funds. Unlike 401(k) contributions, annuity payments are paid with aftertax dollars. But your earnings aren't taxed immediately, so they



faster. You pay for that break in three ways. First, you face a 10% tax penalty if you spend earnings before age 59½. Second, when you do withdraw funds, all the earnings are taxed as ordinary income—even those that accrued as capital gains. That can double the tax on stock gains.

Then there are the fees. The average variable annuity charges a steep 2.11% of assets each year, according to Morningstar Inc. Mutual fund expenses average 1.37%. The difference: Insurance costs, primarily a charge known as mortality and expense, or M&E, that covers death benefits and insurers'

costs. Morningstar figures that M&E and insurance costs average 1.27% on top of expenses of 0.84%. Insurers pay less for because they buy in bulk. But between the lost capital-gains tax break, most annuities may need 15 years to match after-tax performance of a taxable account.

HEAD. Insurers' fat fees created an open-mutual fund giants. They sell annuities directly to investors, eliminating the 6%-plus sales commissions insurers pay agents. But annuity investors will get a jolt in October, when TIAA—the big pension fund for academics, rolls out a new Personal Annuity Select nationwide. The product will feature total costs of just 0.37%. TIAA-CREF calculates its annuity can outperform a low-cost mutual fund in just six years. TIAA annuity at first will offer just one subaccount—a stock index fund. TIAA-CREF will add a bond and three more stock funds next year. TIAA is selling annuities as a simple product with no commissions, says Chairman John H. Biggs.

TIAA is also considering cutting its own fees, TIAA-CREF is considering a study that says insurers charge too much for an annuity's guaranteed death bene-

fits—the promise to return your premiums when you die, even in a bear market. "Even in the worst cases, a basic guaranteed death benefit is worth only 11 basis points," or 0.11% of assets, says Moshe Arye Milevsky, a researcher at York University in Toronto, who did the study.

ESCAPE HATCH. One reason insurers charge more is to provide escape hatches for investors fearful of locking up funds forever. Fidelity Investments, the biggest direct seller of annuities, announced Sept. 7 that investors can elect a richer death benefit. Fidelity will guarantee that an annuitant's estate can collect the highest value of the account on any previous anniversary of the account's opening, even if the funds have slumped since. Investors who choose that feature will pay 0.2% a year on top of Fidelity's 1.76% average fee. Fidelity also joined a growing list of issuers to eliminate surrender charges. These fees, usually 5% to 7%, are levied when an investor cashes out an annuity in its first seven years. Insurers use the charges to help cover commissions. Direct sellers, notably Vanguard Group and T. Rowe Price, led the way on wiping out the charges.

As baby boomers age, sellers are starting to focus on the second stage of an annuity's life: the payout. An annuitant can pull out all the accounts' funds—paying a sizable tax bill in the process—or take occasional withdrawals. But insurers hope more investors will opt for "annuitization"—taking their proceeds as a stream of monthly checks. These payments can be fixed or variable; in either case, they're guaranteed not to fall below a minimum amount during the life of the owner. (Joint annuities are also available to cover the life of the owner and a spouse or heir.) Issuers argue that today's fortysomethings, lacking defined-benefit pensions, will crave a guaranteed income source.

Annuitization hasn't caught on, largely because investors don't want to surrender control of their money. T. Rowe Price addresses that fear with its new Income Account immediate annuity, which starts paying out at once. The fund lets investors pull out without penalty in the account's first five years. John Hancock Mutual Life Insurance tackles another retiree fear

ONLINE INFO

CONSUMER INSURANCE GUIDE

www.insure.com/life/annuity
Offers annuity basics, Morningstar performance data

ANNUITYNET.COM

www.annuitynet.com
Features in-depth educational info on annuities and mild sales pitches for the company's eAnnuities

VARIABLE ANNUITIES ONLINE

www.variableannuityonline.com
For \$9.95 a month, you get portfolio trackers and performance analysis

FUNDMASTER MARKETING GROUP

www.fundmaster.com/calc.htm
Provides a calculator to compute annuity returns and payouts

ANNUITIES ONLINE

www.annuity.com
Has basic information and comparisons for five sponsors' products

Is an Annuity Right for You?

Have you maxed out 401(k), IRA, and other retirement options? The annuity gives you the same deferral as a variable fund, at lower cost.

Do you go for 15 years or more before tapping the

funds? With higher fees and no tax break on capital gains, annuities can take that long to match mutual funds' after-tax return.

► Will you need the funds before you turn 59½? Annuities carry a 10% tax

penalty on earnings withdrawn before then.

► Can you afford to spread annuity payouts over many years? Collecting annuity earnings as a lump sum can push you into a higher tax bracket.

► Are you likely to spend your annuity before you die? Annuities in an estate face income and estate taxes, and don't enjoy the stepped-up basis that wipes out capital-gains taxes on most inherited assets.

DATA: FIDELITY INVESTMENTS, BUSINESS WEEK

with a new annuity that, for an additional 0.35% annually, pays extra if the owner or a spouse goes into a nursing home or needs home health care. For most retirees, however, long-term care insurance would be cheaper.

Do consumers want more features? Shane Chalke, president of AnnuityNet.com, says annuities "won't become a mainstream investment until they're simpler." His Leesburg (Va.) firm

sells basic annuities—with fees averaging 1% and usually no surrender charges—via Internet. Indeed, the Net also teems with advice. The info you gather will help you yourself to understand fees, surrender investment choices, and payout options. Industry can keep cutting annuities' fees and increasing their flexibility, investors might even begin to admit to owning them.

About.com: About-Face?

The badly beaten Net stock shows signs of life

BY AMEY STONE

About.com really burned investors this summer. After its March initial public offering, it surged to a high of 100 and then stumbled to 19¢ by early August. But in recent weeks, About.com has been on the mend (chart). Fans of the company are drooling over rapidly growing revenues and traffic. And in the peculiar ways of Internet analysts, some pros think that even though it has mounting losses and isn't expected to turn a profit until late 2001, it's a value play.

MOVING UP. About.com operates 650 online guides, managed by real people, on a broad range of topics. It basically functions like a search engine, but instead of indiscriminate listings, the guides offer original content, links to other sites, and chat rooms.

The company changed its name from MiningCo.com in May and launched an expensive branding campaign that seems to be paying off. In Media Metrix' July traffic rankings of the top 50 Web sites, About.com jumped from 20th to 17th, with 8.3 million separate visitors. About.com toppled ZDNet Group from its perch as the No. 1 news, information, and entertainment site. "Its reach and ability to generate advertising revenues are increasing

markedly," says Wit Capital analyst John Rohan, who expects About.com to be a site by yearend. Meanwhile, About.com's revenues are growing quickly. For the first time, it took in \$6.1 million, 11 times more than the \$548,000 it garnered in 1998's first quarter. About.com recently signed deals to be included among search providers on Netscape Navigator and to be listed in search results on AltaVista. Amid such encouraging news, Rohan raised his revenue projection for 2000 from \$62.5 million to \$70 million and lifted his 12-to-18-month price target from 60 to 65.

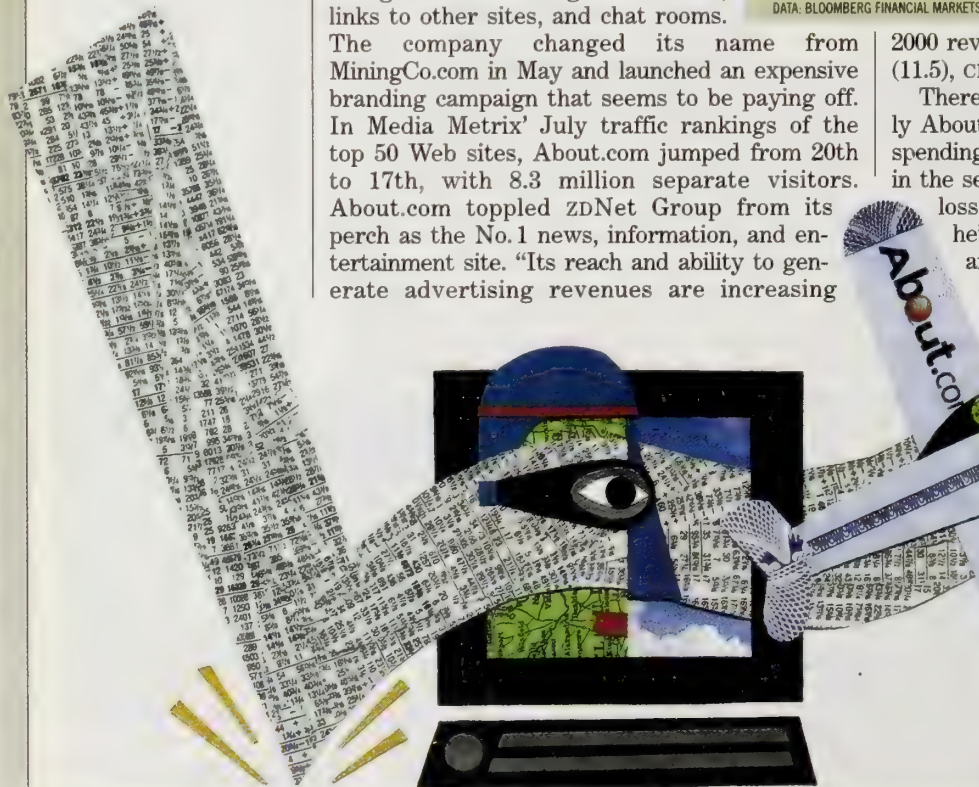
Steve Harmon, chief executive of San Francisco Internet investment firm e-harm, thinks About.com is cheap based on what he calls market cap per user. With a \$400 million market cap, About.com is valued at \$400 per user, unique, or separate, user; the average top 10 Web site is around \$500 per user, says analyst Derek Brown of Volpe Associates. Whelan also finds About.com a bargain by looking at its enterprise value—market capitalization minus debt. About.com has \$61.5 million in cash, and Brown estimates its enterprise value at 5.6 times estimated

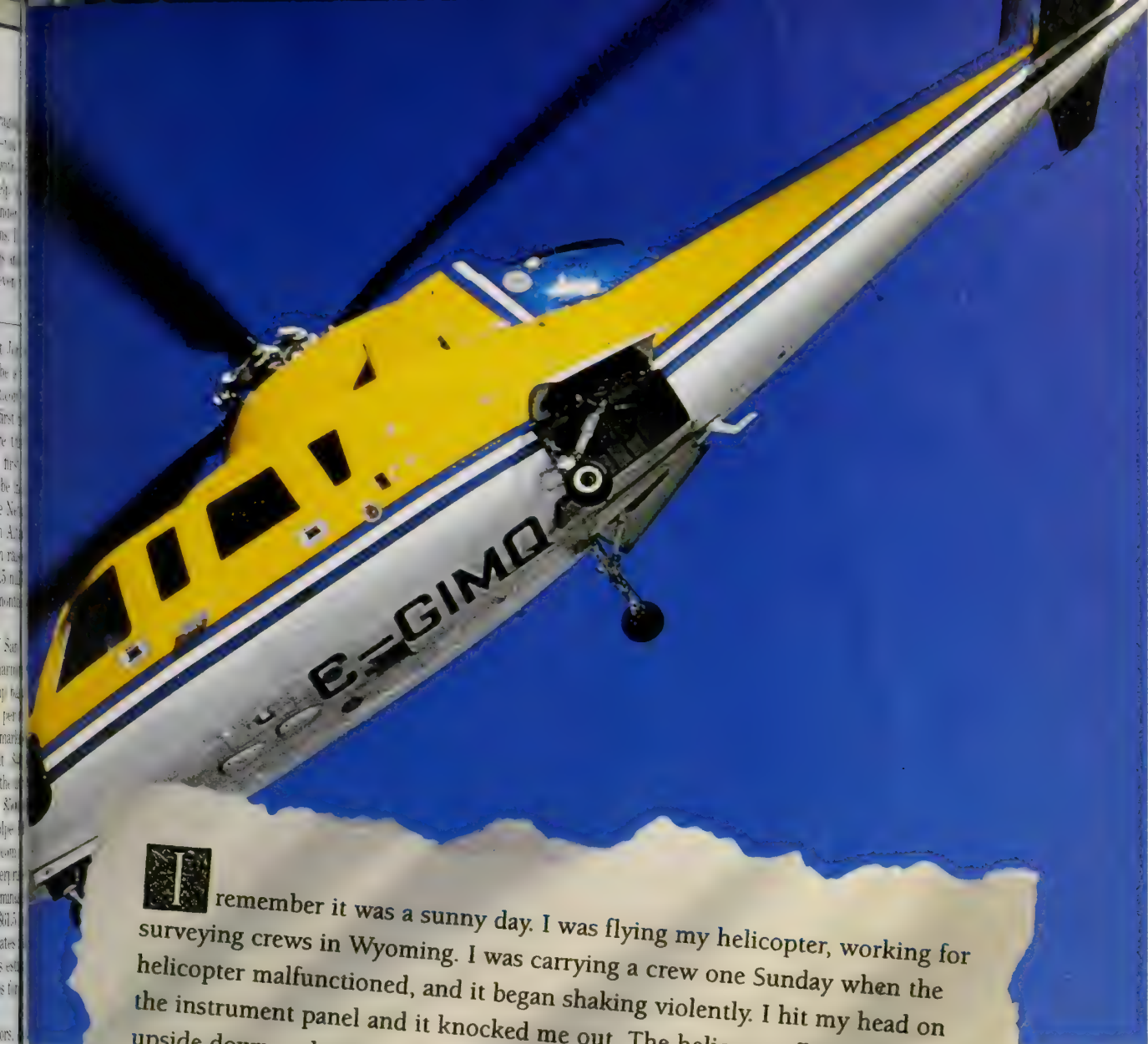
2000 revenues, well under the multiples for CNET (11.5), and Yahoo! (37.8).

There are some concerns for investors, especially About.com's losses. Due mainly to promoting spending, the company lost more than \$20 million in the second quarter, compared with a \$3 million loss a year before. CEO Scott Kurnit says he'll spend less on marketing in the third and fourth quarters. While that will help the bottom line, some feel the site's need for humans to create and edit content will limit how fast the company can grow. And the six-month period for insider sales following the IPO expires September 1, possibly creating a glut of shares.

If you're a die-hard fan of About.com stock, you'll have to be willing to accept a drop in revenue and traffic growth in place of current profits. But after investors have been so badly let down, it might be a while before they're willing to return About.com to its lofty heights.

ABOUT.COM'S WILD RIDE





I remember it was a sunny day. I was flying my helicopter, working for surveying crews in Wyoming. I was carrying a crew one Sunday when the helicopter malfunctioned, and it began shaking violently. I hit my head on the instrument panel and it knocked me out. The helicopter flipped, landed upside down and traveled backwards along the ground. When I woke up, I realized everyone was all right. No one got hurt.

Eric Boyce, St. Peter, Missouri

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Growth Stocks in Disguise'

g some spice to a large-cap portfolio

David Kahn and Donald Bessler, managers of the \$124 million Managers Capital Appreciation Fund, focus on large-cap stocks, but they've spiced up their portfolio with some midcaps and beaten-down growth names. Considerably more volatile than its peers, Managers Capital Appreciation is up 26.6% through Aug. 31. Kahn and Bessler signed on last October when their Santa Monica, Calif., firm, Roxbury Capital Management, was hired as an adviser to boost the fund's large-stock holdings. Since then, the average market value of the stocks in the fund has risen from \$29.7 billion to \$69.8 billion. Roxbury manages 46.8% of the portfolio; Boston-based Essex Investment Management, which has a mandate to invest in companies of all sizes, runs the rest. Kahn and Bessler talked recently with Bill Gerdes of Standard & Poor's Fund Adviser (www.personal-wealth.com):

Q: How do you invest for the fund?

KAHN: We look for market leaders with sustainable earnings growth of 16% to 18% [a year] and higher. Returns on capital drive shareholder value....Our emphasis on return on capital allows us to look beyond accounting distortions, such as pooling of assets, to get at a company's intrinsic value. We tend to have a concentrated portfolio of 30 to 35 names to overweight our best ideas. Roughly 15% of the [Roxbury-managed] portfolio is in special situations and companies with market caps of \$3 billion to \$10 billion.

Q: What are the market leaders in the portfolio?

BESSLER: In retailing, for example, one of our largest positions is Home Depot. Costco is a recent addition. [Both] are category killers with the best management in their subsectors. We like CVS. It has a very focused management.

Q: What are some of your special situations and midcap holdings?

KAHN: The special situations are growth stocks in disguise—companies with great businesses clouded by poor assets. CBS, with its outstanding radio business and relatively lackluster TV performance, is an example. With midcaps, we look for tomorrow's growth leaders. Our midcap growth holdings include Capital One Financial and Cardinal Health.



LIFE'S A BEACH: Kahn and Bessler's Santa Monica firm handles 46.8% of Managers

Q: Do you follow any particular theme?

BESSLER: The convergence of technology, media, and communications is a major theme. A bevy of companies is fighting for access to the consumer. We don't think we can pick the winners of that battle, but we feel comfortable with infrastructure companies and content providers. Our infrastructure holdings include Sun Microsystems, Cisco Systems, and Oracle, and our content holdings include Liberty Media and Yahoo! We're convinced there is a shortage of good content.

Q: What are the fund's sector weightings?

KAHN: Some 46.8% in technology, 10.5% in consumer staples, and 10.1% in communications.

Q: What are the largest holdings in Roxbury's part of the portfolio?

KAHN: Sun, Texas Instruments, Cisco, CBS, and Intel. One of our convergence plays, Texas Instruments, has changed from a diversified technology company to become the leading producer of digital signal-processing chips. Cell phones, modems, and Internet devices all use these chips.

Q: What have you bought recently?

KAHN: Amgen. It has an accelerating return on capital, and we expect its revenues to double in four years. It's introducing a new drug called IL1RA, for rheumatoid arthritis.

Managers Capital Appreciation Fund (MGCAX)

YRN	
	26.61%
1*	34.90
2**	18.56
FIVE HOLDINGS*	
	% OF PORTFOLIO
HOFT	3.56%
RLDCOM	3.25
PROSYSTEMS	2.93
INSTRUMENTS	2.89
	2.80

Aug. 31 **Average annual

DATA: MANAGERS CAPITAL APPRECIATION FUND



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Retail's Details

Why monthly sales reports are required reading

BY KATHLEEN
MADIGAN

This is the third in an occasional series of stories explaining how major economic reports can affect the stock and bond markets.

As the consumer goes, so goes the expansion. That's an essential mantra among economy watchers because consumer spending accounts for two-thirds of real gross domestic product. Not surprisingly, the monthly retail sales report produced by the Census Bureau of the Commerce Dept. is a must-have for investors.

Since the advance data—the first tally of sales—are released about nine business days after the end of every month, the retail sales report is the government's first look at how consumers are behaving. According to Evelina M. Tainer, chief economist for the Web site Econoday (www.econoday.com), stock and bond markets are usually divided in their hopes for the retail numbers. "The bond market likes sluggish retail sales

because that points to a slower overall economy," while "strong retail sales are good for stocks," she says, because that signals robust business activity. Except that right now, the markets aren't reacting to retail sales numbers the usual way. Today, Tainer notes, bond markets are wary that an overheated economy will impel the Federal Reserve to hike short-term interest rates for the third time since June.

The August retail report comes out at 8 a.m. on Sept. 14. It's one of the last major economic indicators to be released before the Federal Open Market Committee's next rate-setting meeting Oct. 5. Wall Street expects an 0.8% increase, vs. 0.7% in July. But with retail sales already running a robust 9% ahead of last year's pace, another strong report may spell a rally day for fixed-income and equity investors. You can see the report as it is released at www.census.gov/cgi-bin/briefroom/BriefRetailSales.

The report that Wall Street follows with such keen interest has a complex methodology that starts out as mail-in surveys to stores ranging from mom-&-pop establishments to megaretailers. The advance report, such as the one released Sept. 14, carries results from about 40,000 retailers. In the following month, the numbers will be revised to cover more complete sales data for up to 10,000 vendors. But adjustments to the report are expected to be modest. Retailers from car dealerships to department stores to restaurants are covered in the government's report. Web retailers are included as well, but their sales still account for less than 1% of the nearly \$3 trillion in total retail activity.

Given that most Americans are involved in shopping, you may think that interpreting retail numbers is a straightforward matter. But analyzing the numbers can be as tricky as finding a swimsuit that fits well. For one thing, retail sales are grouped by stores, not by types of merchandise. Buy a bottle of aspirin at the Food Lion, and it shows up as a grocery receipt, not as a pharmacy sale. And Tainer notes that sales of motor vehicles, some 20% of total retail buying, are notoriously volatile. That's why the Census publishes a nonauto retail number at that figure for the real trend in consumer spending, says Tainer, especially if dealer incentives have temporarily boosted car sales for a month.

Because retail sales are not adjusted for inflation, Tainer also warns investors to be wary of price changes. For example, rising energy prices can boost sales at gasoline stations, even though the gallons tallied by gallons may show no increase at all. The retail sales data eventually find their way into the monthly consumer spending report as well as into the quarterly GDP release. And policymakers use the report as a major clue for tracking the economy's health. That's why if you're looking for early information on how the economy is doing, the retail sales report should be high on your shopping list.

Shop Till You Drop

A list of the major retail reports

RETAIL SALES

MONTHLY The Census Bureau surveys 4,100 retailers monthly. Dollar values are not adjusted for price changes.

CHAIN-STORE SALES

MONTHLY Reports by big retailers on monthly sales compared with sales from a year ago. The most important comparison is for

sales in stores open at least a year.

RETAIL SURVEYS

WEEKLY, USUALLY TUESDAYS

Two private surveys track weekly retail activity: LJR Redbook Research and BTM/Schroder. Both reports compare the percentage change in the latest week's number with the previous week and to a year ago.

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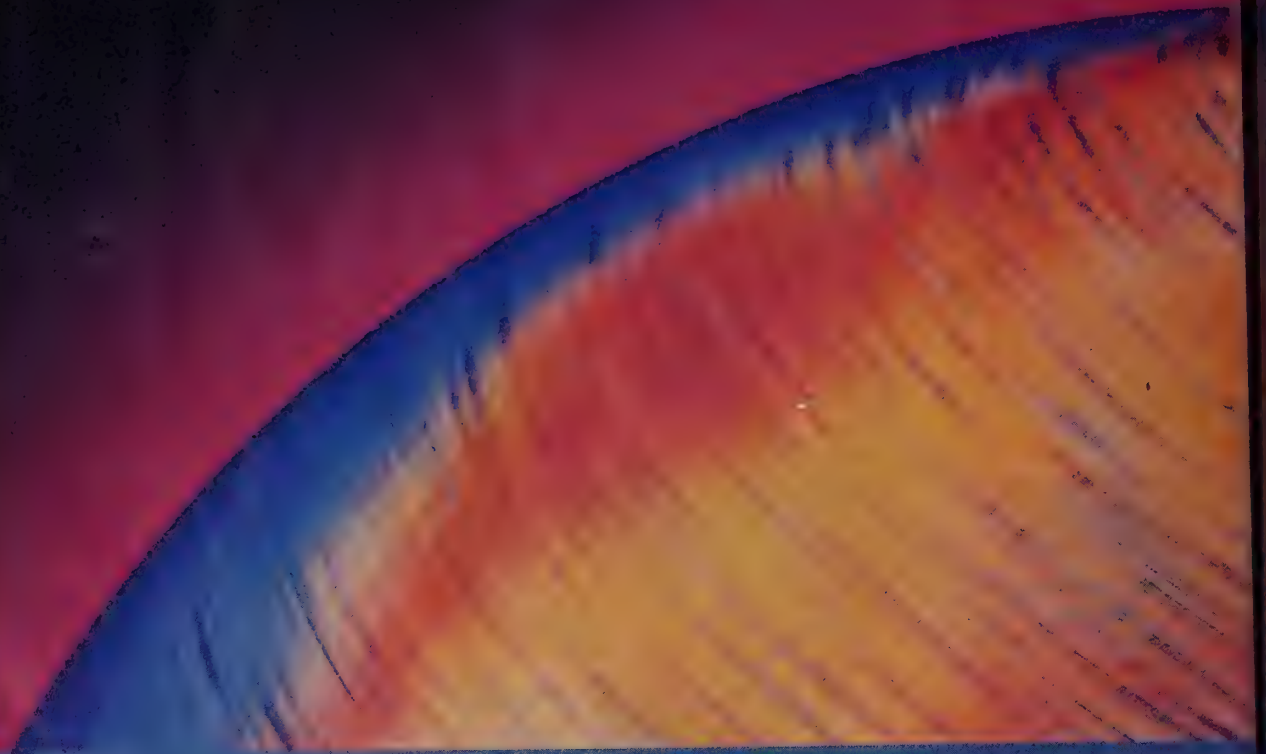
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Will the frontrunners today have a lock on the future? Will you lead or be left behind? Find out September 30, 1999 at the Marriott Marquis in New York City.

For more information on The 1999 Global Convergence Summit, or to find out more about sponsor and speaker opportunities:

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MERRILL GIVES YOU A BARGAINING CHIP



BY ROBERT BARKER

You can use its new, relatively low-rate schedule of financial services to get a better deal from your broker

Something tells me sales of Prozac must have zoomed in June. That's when Merrill Lynch's army of 14,800 brokers learned that their firm had come up with a new scheme for pricing its services, including a plan to offer online trades for \$29.95 each—effectively slashing one big way they make a living. If I were a broker at Merrill or any other full-service firm, I'd want to ask for the big bottle of Prozac, extra-strength, plus two Advil on the side.

But I'm not a broker, and what's a major downer for many of them spells happier days for the rest of us. Merrill's cut-rate online trading service, which matches discount brokerage leader Charles Schwab's in price, isn't set to begin until December. But more important to anyone who prefers a full-service broker to a discounter is Merrill's new, easy-to-grasp schedule of fees. It's available now in Merrill's new "Unlimited Advantage" account. Its simple and relatively low rates give investors a weapon to negotiate the most brokerage service for their money.

How? By demanding terms at least as favorable as what Merrill, the world's largest brokerage firm, now offers. The most maddening reality of dealing with most full-service brokers is all the uncertainty over fees. The game works this way: Firms post high sticker prices and then, if forced, start discounting—typically up to 30% at a broker's discretion. This leaves clients either exhausted or wondering if

they're getting rooked. It's a lousy way to run a fiduciary relationship. The smarter firms know this and, like



Merrill, are offering clients more

You can still do business the old way, by commission, at Merrill. But under the new scheme, the firm offers a battery of service: financial planning and investment research, advice and trading any way you want—via phone, or the Internet. Merrill also has checking and other banking services, mortgages, electronic bill payment, and a Management Account. The price: 1% a year on equity assets, and 0.3% on fixed-income and market investments (table). Those rates apply to clients with more than \$1 million, and a minimum fee of \$1,500 a year.

NO "EXTREME" TRADING. This fee schedule is work for everyone. While Merrill highlights "limited" trading, it actually excludes day trading and investors using other strategies it deems "extreme." How much trading is too much? Merrill is vague about that. Trading 150 or 200 shares a year wouldn't set off alarms, says Joseph J. Feld, a big Merrill broker in Manhattan. Nor would you get your money's worth

if you rarely trade, or if you have less than \$100,000. On the other hand, the \$1,500 minimum fee works out to 1.5%. There are cheaper alternatives. Put \$100,000 in a PaineWebber account, for instance, and you can make 10 trades a year for \$750.

But if you're an active investor with a larger account, Merrill's offer is a good one. It's a good deal compared to the \$25,000 at Merrill's old

lomon Smith Barney's plan, for example, limiting trading more strictly, yet nominally costs more. In a \$500,000 all-stock account there runs \$5,000 a year. Merrill's 1% fee would come to just \$5,000. A \$3 million account would cost \$26,875 at Merrill's old plan, \$25,000 at Merrill.

Does that mean you should rush over to Merrill? Not necessarily—especially not if you're looking for good advice and service from your current broker. What you should do, though, is take a look at Merrill's fee schedule and use it to get your best deal.

Chances are, you can. The only thing that might hurt more than price competition is talking to Merrill. They'd rather keep you focused on something other than the value they offer. Fine, but don't let it hurt you to refocus them on price. They'll listen. As one veteran Florida broker, a former Merrill man who now works for a big rival firm told me, "Brokers are realists. 'Competition drives the price.' I'll match [Merrill] in a heartbeat."

Merrill's main rivals, such as PaineWebber, already plan to announce new ways to price their services. If we're lucky, online trading and more pressure from discount brokers and the Internet will force the full-service crowd to make us happier, slashing prices and giving customers a better deal.

For barker.online, go to www.businessweek.com/investor/ or AOL, keyword: BW Daily

The Price of Full Service

Merrill's New Standard

TYPE OF ASSET	ANNUAL FEE PER \$100,000*
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DATA: MERRILL LYNCH & CO.

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WORKING UP PICO



E. G. MARCIAL

If you haven't heard of PICO Holdings (PICO), you're not alone. It gets hardly any coverage on Wall Street. But PICO is seen by some as a value play: It has water and land assets, insurance businesses, and a Net venture to boot. The stock is trading way below the value of its parts—and doesn't reflect the worth of its Internet link, argues Amit Wadhwaney of New York's J. Whitman.

PICO's assets include Nevada Land & Resource, valued by Wadhwaney at \$71 million, or \$6.60 a share; Vidler Water in the Southwest, worth \$8 a share; two property and casualty insurers worth \$6.20; and other assets he values at \$6.25.

PICO's Web connection comes from its 44% stake in HyperFeed Technologies, a provider of financial data and news to professionals and consumers worldwide. HyperFeed is the owner of PCQuote.com, which is scheduled to go public in weeks, at 11 to 13 a share.

Right now, HyperFeed represents the lowest value in PICO's diversified holdings, he says. But it also has the largest potential for growth. He figures that if PCQuote.com trades at 12 a share, it would imply a valuation of \$188 million. HyperFeed will retain half of PCQuote.com's 15 million shares outstanding. To PICO, that would mean an aftertax value of \$31 million, or \$3.20 a share, estimates Wadhwaney. But that's a very lowball figure, he maintains.

He says PCQuote.com could rapidly shoot up, just like many other Internet IPOs. He calculates that every \$1 change in the per-share price of PCQuote.com's will mean a 25¢-a-share change for PICO. PICO earned 18¢ in the quarter ended June 30, on sales of \$14.5 million. Says Wadhwaney: "Any surprises will be on the upside." PICO currently trades at \$20 a share. All in all, says the analyst, PICO is worth at least \$30.

DSP COULD GET SPLICED

In this market, it isn't enough to meet earnings expectations: Companies need to beat the so-called whisper numbers. That's what DSP Communications (DSP) learned when its second-quarter earnings met consensus estimates but were below whisper figures. Shares of DSP, a leading developer of chip sets for the cellular, PCS, and wireless-phone markets, dived from 31 to 23 in just two days.

But some analysts remain bullish.

Matthew Robison of Ferris Baker Watts upgraded his rating to strong buy, with an unchanged 12-month target of 40. And Warburg Dillon Read's Jeffrey Schlesinger stayed with his strong-buy opinion. DSP has rebounded to 27.

The stock may heat up even faster: Several pros believe that DSP is being eyeballed as a buyout by Motorola and Conexant Systems, a developer of technology to combine analog and digital functions. Both companies, says a California investment manager, would round out their products with DSP's technology. DSP's products have a high level of software components.

Ferris Baker's Robison points out that DSP provides "digital signal processing algorithms and code, along with application-specific circuitry in the form of chip sets for wireless handsets," which, the analyst says, has the largest unit volume electronics market worldwide. DSP is well positioned, he adds, to benefit from the strong worldwide demand for wireless handsets, particularly in Japan, Korea, and China. Motorola declined comment. DSP didn't return calls. Conexant spokesman Michael Stugin says, "We're in the process of looking for acquisitions and we expect to do a deal at the appropriate time." But he wouldn't comment on DSP specifically.

GENESIS: A STRONG START ON THE WEB

What a difference a year made for J.W. Genesis Financial (JWG), a full-service brokerage. Its stock has streaked from 5 to 16. Also, JWG acquired Genesis Merchant Group Securities last year for \$15.8 million—and this year its institutional sales and research unit for \$4 million and its clearing operations for \$59 million.

Cash-rich, with about \$60 million, JWG is diversifying into the Internet: It has formed mvp.com, a Web portal designed to provide lifestyle info: sports, health and fitness, and financial services. JWG has hired former National Football League star John Elway to spearhead mvp.com as its spokesman. The former Denver Broncos quarterback owns 50% of mvp.com.

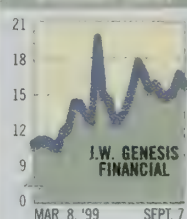
With the Internet unit likely to go public after it gains momentum (it will be launched at Super Bowl XXXIV in January, 2000), "this is the time to buy into J.W. Genesis," says Charles Payne, an analyst at Wall Street Strategies, a New York research firm. He sees the stock "doubling, at a minimum, in 12 months," helped by the projected impact of mvp.com on JWG's sales and earnings. He figures mvp.com is potentially worth \$100 million. But even without mvp.com, he figures JWG is worth 20 a share. Joel Marks, vice-chairman of JWG, says the company is in talks with America Online. mvp.com aims to become the leading lifestyle portal, he says.

LATELY, A LITTLE LACKLUSTER



DATA: BLOOMBERG FINANCIAL MARKETS

PART OF A BANNER YEAR



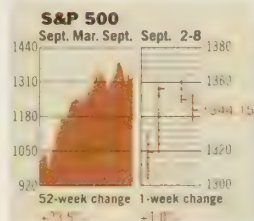
DATA: BLOOMBERG FINANCIAL MARKETS

RECOVERING FROM A DIVE



DATA: BLOOMBERG FINANCIAL MARKETS

STOCKS



COMMENTARY

Traders continued to focus on the Federal Reserve, watching for signs of another rate hike. U.S. stocks rose sharply on Sept. 3, when employment data suggested that inflation was under control. But the market slipped slightly afterward because of continuing fears that the Federal Reserve may again raise rates to control inflation. Oil prices rose to a two-year high on Sept. 7.

Data: Bloomberg Financial Markets

U.S. MARKETS

	Sept. 8	% change Week	% change Year
Dow Jones Industrials	11,036.3	0.9	37.6
Nasdaq Composite	2808.7	2.1	69.1
Nasdaq 100	2454.7	2.1	90.8
S&P MidCap 400	401.8	0.9	31.7
S&P SmallCap 600	180.0	1.2	18.1
S&P SuperComposite 1500	282.3	1.0	31.0

SECTORS

	Sept. 8	% change Week	% change Year
S&P/BARRA Growth	772.4	1.2	36.5
S&P/BARRA Value	594.5	0.8	25.4
S&P Basic Materials	129.2	-0.4	19.4
S&P Capital Goods	1043.5	3.2	98.7
S&P Energy	885.8	2.3	27.8
S&P Financials	130.6	-0.4	19.0
S&P REIT	80.3	-0.1	-5.0
S&P Transportation	638.1	0.2	9.1
S&P Utilities	253.6	-1.1	7.2
GSTI Internet	417.4	3.8	211.1
Morgan Stanley Cyclical	585.8	1.5	40.5
PSE Technology	647.6	2.9	104.9

BEST-PERFORMING GROUPS

	Last month %	Last 12 months %
Semiconductors	16.7	145.3
Instrumentation	13.6	142.9
Drugs	13.4	88.3
Electrical Equipment	11.7	88.2
Medical Prods. & Supplies	10.3	72.9

GLOBAL MARKETS

	Sept. 8	% change Week
S&P Euro Plus	1363.1	1.0
London (FT-SE 100)	6253.6	-0.4
Frankfurt (DAX)	5400.7	1.6
Tokyo (NIKKEI 225)	17,641.4	-0.9
Hong Kong (Hang Seng)	13,356.6	-1.4
Toronto (TSE 300)	7055.0	1.1
Mexico City (IPC)	4854.3	-4.6

FUNDAMENTALS

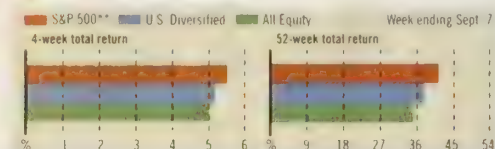
	Sept. 7	% change Week ago
S&P 500 Dividend Yield	1.25 %	1.24 %
S&P 500 P/E Ratio (Trailing 12 mos.)	33.7	31.1
S&P 500 P/E Ratio (Next 12 mos.)*	23.6	23.2
First Call Earnings Revision*	-0.58 %	-0.32 %

*First Call Corp.

TECHNICAL INDICATORS

	Sept. 7	% change Week ago
S&P 500 200-day average	1293.2	1289.1
Stocks above 200-day average	40.0 %	38.0 %
Options: Put/call ratio	0.61	0.56
Insiders: Vickers Sell/buy ratio	1.34	1.36

MUTUAL FUNDS



EQUITY FUND CATEGORIES

Leaders	Four-week total return	%	Laggards	Four-week total return	%
Technology	15.1		Precious Metals	-0.4	
Japan	11.8		Natural Resources	0.2	
Health	9.9		Mid-cap Value	1.1	
Small-cap Growth	9.6		Small-cap Value	1.2	
Mid-cap Growth	9.4		Real Estate	1.2	
Leaders	52-week total return	%	Laggards	52-week total return	%
Technology	128.6		Precious Metals	3.3	
Pacific/Asia ex-Japan	89.3		Real Estate	6.8	
Japan	86.5		Europe	14.5	
Diversified Pacific/Asia	78.4		International Hybrid	14.9	
Communications	74.0		Small-cap Value	16.1	

INTEREST RATES

KEY RATES	Sept. 8	Week ago	Year ago
MONEY MARKET FUNDS	4.80 %	4.77 %	5.10 %
90-DAY TREASURY BILLS	4.80	4.97	4.88
1-YEAR TREASURY BILLS	5.25	5.30	4.81
10-YEAR TREASURY NOTES	5.93	5.99	4.95
30-YEAR TREASURY BONDS	6.07	6.08	5.28
30-YEAR FIXED MORTGAGE†	8.00	8.00	6.76

BLOOMBERG MUNI YIELD EQUIV

Taxable equivalent yields on AAA-rated, tax-exempt municipal bonds, assuming a 31% federal tax rate.
10-yr. bond 3.36

GENERAL OBLIGATIONS 4.88 %

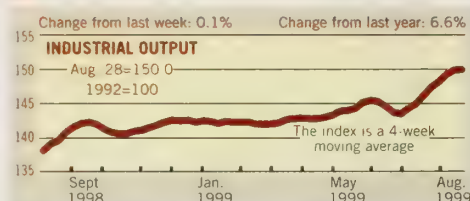
TAXABLE EQUIVALENT 7.07

INSURED REVENUE BONDS 5.08

TAXABLE EQUIVALENT 7.36

†BancQuote, Inc.

BW PRODUCTION INDEX



Information on each of the index components is at www.businessweek.com.
BW production index Copyright 1999 by The McGraw-Hill Companies

The production index hit a record week ended Aug. 28. The month of August also soared to 150 from 147.4. The unaveraged index dipped to 149.9, from 150.3 in the week. After seasonal adjustment, of trucks, coal, and rail-freight increased. Crude oil output fell 4.3% generating capacity at only 93.4% steel, autos, electric power, and lumber also down.

THE WEEK AHEAD

RETAIL SALES Tuesday, Sept. 14, 8:30 a.m. EDT

► Retail sales probably increased a big 0.8% in August, says the median forecast of economists surveyed by Standard & Poor's MMS, a division of The McGraw-Hill Companies. A jump in motor-vehicle purchases lifted sales. But even excluding cars, retail receipts likely rose by a healthy 0.4% last month. In July, overall sales advanced 0.7% and non-auto sales increased 0.3%.

CONSUMER PRICE INDEX Wednesday, Sept. 15, 8:30 a.m. EDT

► Consumer prices for all goods and services likely increased 0.3% in August, but the gain was probably only

0.1% when food and energy prices are excluded. In July, the total CPI rose 0.3%, while the index excluding food and fuel edged up 0.2%.

BUSINESS INVENTORIES Wednesday, Sept. 15, 8:30 a.m. EDT

► Inventories held by manufacturers, wholesalers, and retailers probably grew a solid 0.4% in July, says the S&P MMS survey. In June, inventories increased 0.3%.

INDUSTRIAL PRODUCTION Thursday, Sept. 16, 9:15 a.m. EDT

► The S&P MMS median forecast expects that industrial output in August was unchanged from its July level.

Back then the heat wave pumped up energy use, and total industrial output jumped by 0.7%. The average operating rate of all industry in August probably fell to 80.5% from July's 80.7%.

HOUSING STARTS Friday, Sept. 17, 8:30 a.m. EDT

► Housing starts likely slipped an annual rate of 1.63 million in August down slightly from 1.66 million in July.

BusinessWeek ONLINE

For more investment data and the components of the production index, visit www.businessweek.com.

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listed only in tables are not included.

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This Week, Online

Business Week presents frequent live conferences and chats on America On-line—your opportunity to ask questions about timely topics.

Tuesday

What's the weather forecast for the stock market—and the economy—as we approach 2000? That's one of the many questions BW's chief economist, William Wolman, will have provocative answers for.

Sept. 14
4:30 p.m. EDT

Thursday

Amerindo Technology is one of the top-ranked mutual funds in that sector, and its director of research, Emeric J. McDonald, will tell us about tech stocks that have done best for the fund—and those with the most promise for the future. **Sept. 16**
9 p.m. EDT

AOL keyword: BW Talk

Transcripts of all conferences are available for downloading from the BW Online area on AOL.

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FLEXIBILITY: THE ANSWER TO BURNOUT

Americans are working more hours than the Japanese these days, and nationwide burnout appears to be in the making. Not that people complain about the prosperity. It's just that, logging 2,000 hours a year on the job, they're tired, stressed out, and often a little manic. Weary middle-aged men are already bailing out of Corporate America, taking early retirement, at a record rate. Working moms increasingly are stretched to the breaking point between family and office. And even a growing number of young Net hotshots are crashing and burning under the load. This fall, as people return to the office and kids go back to school, it may be time for corporate managers to begin thinking about redesigning work. The conventional 50-, 60-, or 70-hour workweek (do you know anyone working only 40 hours?) isn't working. Creativity, productivity, and eventually profitability are sure to suffer unless companies begin to show some real flex.

Take the geezers (page 108). In 1970, 83% of men between 55 and 64 were still working. That's down to 68% and falling, despite a strengthening job market. Options, a rising stock market, and hefty pay packages are allowing an increasing number of managers to jump ship into early retirement. After decades of late nights, living on the road, and weekend work, they're bailing. And with no regrets. Corporate loyalty is low after years of downsizing (which often targeted highly paid middle-aged men who had to join the ranks of the "retired").

The real crisis is just ahead as the giant Baby Boom generation moves into its fifties, with many already rich enough to retire early. Corporations may soon find themselves in a serious crisis—an age-related brain drain. Decades of experience, knowledge, and contacts are about to walk out the door.

Moms—and dads—can't walk, but they can get so tired that they spend less quality time with their employees. Middle-income parents are logging 260 more hours a year at work than they did a decade ago, according to the Economic Policy Institute, and while that's buying a better material life, it is stressing families to the max (page 83).

The answer to burnout is flexibility. This is as true for 58-year-old male senior managers as for working moms. Moms, this year's version of Soccer Moms. What needs to be done is fairly clear. Reengineer the job to end working hours at eight, ten, or twelve hours at a time. Encourage telecommuting, which cuts endless hours of real-time commuting. Support three- and four-day workweeks. Let people work around projects that must be completed at a certain date, allowing people to organize their own time.

A BUSINESS WEEK poll shows that nearly three quarters of American adults want the government to do more to help working families. And making the working life easier. Minivan Moms is becoming an important issue for Republicans and Democrats. Both George W. Bush and Vice-President Al Gore are courting them. Some 63% of women and men say they would be more likely to vote for a member of Congress who favors expanding the Family & Medical Leave Act to cover such things as regular medical exams. There is also pressure to change federal law to allow people to work extra hours to take their compensation in tax-free lump sums rather than pay.

But 90% of Americans also think companies should do more now. Corporate America has got to get more flexible. It has been a long time since people called their jobs a "race." Increasingly, they are doing that again.

BANKS SHOULD COME CLEAN ON LAUNDERING

The Russian money-laundering story is a scandal in more ways than one. It is a failure of federal law, government regulation, and bank self-discipline. The advent of high-speed electronic wire transfer systems that move trillions of dollars every day make the policing of money laundering more difficult, but not impossible. Banks shouldn't hide behind technology to excuse illegal behavior.

The truth is that commercial banks find the business of moving money around the world for high-net-worth individuals extremely profitable. They've been in it for decades. Some banks even have a history of working with U.S. intelligence agencies to move money quietly. Countries with poor economic policies often experience capital flight, and banks have been there to facilitate the transfer. In the process, legal and illegal monies often get commingled, which appears to be the case with Russia. Back in the '70s and '80s, hundreds of billions of dollars left Latin America for the U.S. and

Europe through commercial banks. They know how to do it.

They therefore know how to stop it. Certainly federal law needs updating. Money laundering laws cover only six crimes and need to be broadened. Regulators have to monitor the flow of electronic funds through wire systems well. But banks bear the major responsibility. Bank of New York clearly courted Russian capital flight by employing people connected to that country's new political and financial elite. When a torrent of tens of billions began pouring into Moscow, BONY should have surmised that a portion of the flow might be illegal. The bank should have called the feds. Instead, it appears that a competitor in the business of moving money for the world's rich, Republic National Bank of New York, blew the whistle.

Money laundering is a gray area of global banking. Bankers have been operating in these shadows for a long time. They should know right from wrong.

MALL BUSINESS

A SPRINT TO THE MAILBOX

IN BOXER SHORTS:



Illustration by Tom Hume for Fireman's Fund Insurance Co., New York, NY

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BusinessWeek

SEPTEMBER 27, 1999

THE McGRAW-HILL

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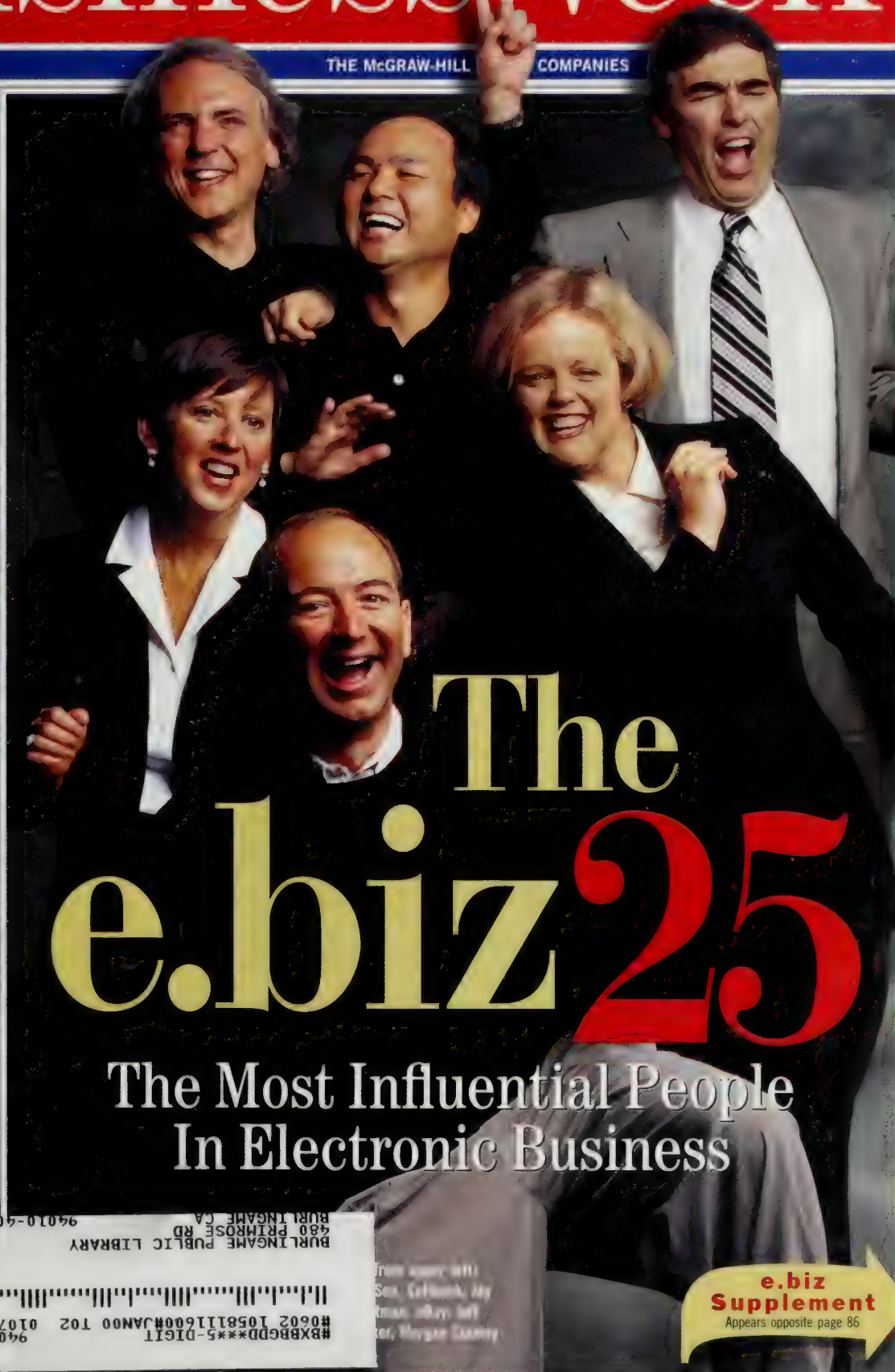
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The e.biz 25

**The Most Influential People
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Supplement**

Appears opposite page 86



PROFITS & PRINCIPLES

The issue of global warming
has given rise to heated debate.
Is the burning of fossil fuels
and increased concentration of
carbon dioxide in the air a serious
threat or just a lot of hot air?

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COVER STORY

In our inaugural list of the 25 most important people in e.biz, we explain how masters of the Web like Steve Case and Pehong Chen are changing almost every industry in the world page EB7



BusinessWeek

SEPTEMBER 27, 1999

Cover Story

EB7 E.BIZ 25

Who are the innovators and influencers determined to overthrow the old world order of paper, phone, and overexcited salespeople? With this, our first list of the e.biz 25, we pick the pioneers blazing radical trails and the risk-takers behind them. People like Louis Borders of Webvan, Tim Koogle of Yahoo!, and Lawton Fitt of Goldman Sachs. It took a lot of spirited debate, but we think we've identified those most willing to leap the chasm between what they know and what they believe

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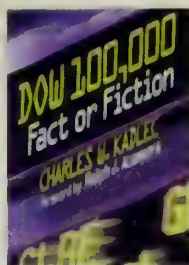
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Up Front

EDITED BY ROBERT McNATT

I-WAY PATROL

HOW AMAZON GOT ON IBM'S BAD SIDE



IT ONLY TAKES ONE thing for a company not to have Amazon.com publicly list what books its employees are buying through its Web site: A simple request from the compa-

ny. But at IBM, that request came from the top, and included a pointed e-mail from IBM Chairman Louis Gerstner Jr. on the virtues of Internet privacy. Moreover, IBM employees even considered boycotting Amazon.com.

When Gerstner learned that Amazon.com was publicly listing the buying habits of IBM employees, he was not happy. On Sept. 2, he asked his em-

ployees if they were as upset as he was that IBM was one of Amazon.com's "Purchase Circles," which list the top purchases at companies—though not of individuals there. Gerstner also wanted to know if, "as a statement of our firm belief in Internet privacy," employees would boycott Amazon.com.

Within hours, some 5,000 employees answered Gerstner: 95% didn't want to be in Amazon.com's voluntary program.



Before Gerstner could tell Amazon.com CEO Jeff Bezos, someone tipped off Bezos, who then removed IBM from the list. Gerstner later sent Bezos a polite but pointed message about privacy: "I'm certainly not

telling you how to run your business, but I do urge you to view this as an enormously important issue." *Ira Sager*

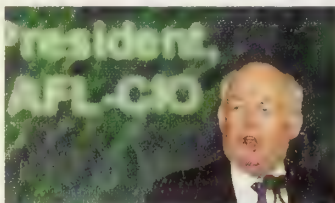
TRADE TIFFS

PEACE TALKS BEFORE THE TRADE WARS

PROTESTERS OF ALL STRIPES are planning to converge in Seattle for the World Trade Organization Summit, starting Nov. 30. That promises a raucous scene during the talks. U.S. negotiators, however, hope to present a calm and united front, boosted by a pre-conference summit between a major labor and business leader.

On Sept. 28, AFL-CIO President John Sweeney and U.S.

SWEENEY: *A calm front*



Chamber of Commerce President Thomas Donohue will hold private talks. The two will seek "constructive solutions," says Donohue. The Advisory Committee on Trade Policy and Negotiations (ACTPN), a business group set up to advise the U.S. negotiators, has so far been deadlocked on what advice to give. Labor union members hate the WTO's push to globalization and oppose expansion of WTO powers, other than more enforcement of labor and human rights. Big Business, on the other hand, generally endorses free trade.

The odds that Donohue and Sweeney may bridge so big a gap aren't great. But at least they're talking. Last February, Sweeney became the first labor chieftain to address the Chamber board. Donohue spoke at the AFL-CIO's winter meeting in Florida. *Paul Magnusson*

TALK SHOW "In general, I do not believe in spying against one's country"

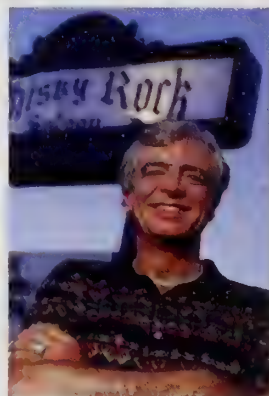
—Britain's Melita Norwood, 87, a longtime Soviet spy

AFTERLIVES

MODEM OPERANDI

HE HAS WEATHERED two corporate bankruptcies and two divorces. So what is modem inventor Dennis Hayes up to now? By day, the 49-year-old Atlanta entrepreneur, whose modems once dominated the industry, advises startups through his Virtual Resources consulting firm. But at night, Hayes indulges a thirst for shock rock at his new Atlanta club, the Whisky Rock, a divey joint that sits on Atlanta's seedy Buford Highway.

In college, Hayes listened to Janis Joplin and Jimi



HAYES: Baud-y hobby

Hendrix. Now his taste in music is more like Marilyn Manson and Rob Zombie. Learning the music

"has been like drinking out of a firehose. It's been a lot of fun," he says. Hayes hints that his club gig may be the first act of his second career. "I'm not sure where it all goes yet," he muses, "but I'm evaluating opportunities to create linkages between

my day job and my night job."

In 1997, Hayes held stock worth \$135 million in a structured Hayes Corp. after a second bankruptcy, he will only say now that he has "enough to live on." *Dean F...*

CARD SHARPS

AMEX' NEW CARD: HOW HIP CAN IT BE?



AMERICAN EXPRESS WANTS tech-savvy customers for its new Blue credit card, designed for online buyers. But AmEx' hipper-than-thou marketing bid is like hearing your dad use the word "jiggy," and may misfire, warn some advertising pros.

AmEx recently sponsored a Sheryl Crow concert in

New York's Central Park. The company also used the Blue Crew of 36 bike-helmeted, backpack-wearing, Spandex-clad street canvassers

to give out blue tickets to the concert. The Blue Crew arrives soon in other cities with new prizes. AmEx says it's all designed to "cut through the clutter of card offers."

Will techies log on to Blue? "The younger consumer gets the feeling that they are being played, and that sets off the B.S. detector," says William Heater, Heater Advertising, who has worked on Reebok and Infiniti accounts. Adds "Jell Helm, who headed the creative team for Timberland ads: "I think people see through concerts and gifts. They would drop all of that corny blue backpack stuff and concentrate on the card. I'd like that do more of the work. Maybe AmEx should just admit its age." *Roy Furchgo*

"I wanted the best protection available and APC delivered."

— Fred Lugano, weatherization.com, Vermont

3 million computer users can't be wrong about APC power protection

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Telephone/network surge suppression to maintain your online connection

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- User-replaceable batteries reduce service costs
- Easy overload recovery
- Site Wiring Fault indicator

- Audible and visible alarms alert you to power events as they occur
- \$25,000 equipment protection guarantee (U.S. and Canada only)
*See policy for details
- "Best in Class" longest runtime guarantee (5-40 minutes)

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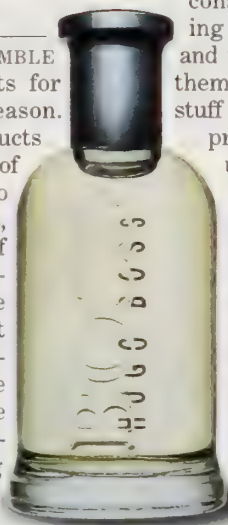
Up Front

MAD AVE.

SCRATCH, SNIFF, THEN CLICK

PROCTER & GAMBLE smells online profits for this Christmas season. The consumer-products company, a licensee of fashion giant Hugo Boss, is selling BOSS, a new \$49 bottle of men's cologne, exclusively via the Net. In an attempt to harness the marketing cachet of the Net, BOSS is for sale only at retailer Jamin.com, bypassing department and cosmetics stores until next March.

Typically, one-third of all fragrance sales are in December. The hope is that this initial Net-only distribution strategy will reinforce the brand as one that "drives innovation and change," says



Marketing Director Achim Daub.

But how will BOSS's target consumers—men earning more than \$70,000 and the women who love them—get a whiff of the stuff before they buy? No problem. P&G will also use 30 million "scratch-and-sniff" ads in magazines such as *Esquire*, *GQ*, *Cosmopolitan*, and *Yahoo! Internet Life* to introduce BOSS and drive Web traffic.

Net-only marketing not innovative enough for you?

Well, Daub dreams that one day, the world will have Internet Smell-o-Vision. "We'll figure out how to transport scent molecules by telephone. Five years from now, you'll be able to watch TV and smell the sweat of Charles Bronson." Uh huh. *Dennis Berman*

ILL WINDS

POUND-FOOLISH ON OFFICE PSYCH CARE

THE LACK OF MENTAL HEALTH coverage for most U.S. workers can be a hardship for employers as well as employees.

COSTS OF DEPRESSION

LOSS FOR
LOW-SALARY WORKER
\$182 per month

LOSS FOR
HIGH-SALARY WORKER
\$395 per month

DATA: HEALTH AFFAIRS

A study cited in the October issue of *Health Affairs* says mental illness can cost billions—up to \$4,700 per year per person in lost efficiency.

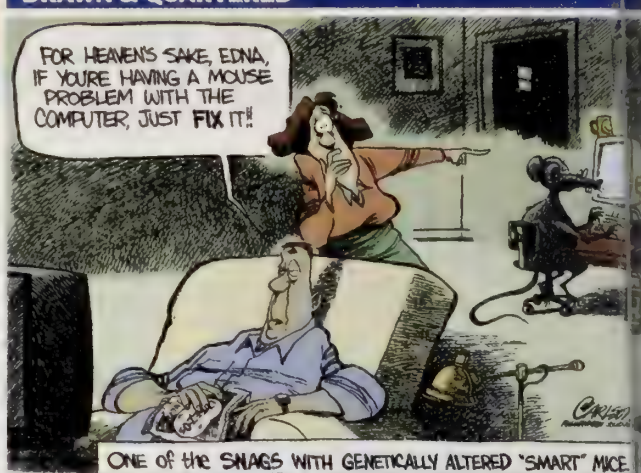
It would cost less if health-care plans were more generous with mental-health benefits. According to "Depression

In The Workplace: Effects on Short-Term Disability," partly funded by the National Institute of Mental Health, workers without adequate psychiatric coverage skip 1.5 to 3.2 more days of work monthly than their covered co-workers. Says Richard Frank, a Harvard University professor who co-wrote the study, better benefits "will get [employees] back to work quicker and make them more productive."

Insurers have traditionally seen clinical depression, which affects up to 10% of the population, as lengthy and difficult to treat, so they have offered just minimal mental-health coverage. But many plans don't yet account for the new drugs and shorter therapies being developed.

Some companies, such as Levi Strauss, take strong action to alert employees to the dangers of clinical depression. That may turn out to be an example of doing well by doing good. *Mica Schneider*

DRAWN & QUARTERED

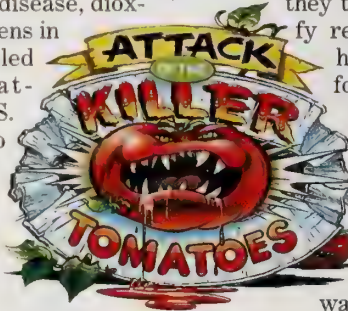


ONE OF THE SNAGS WITH GENETICALLY ALTERED "SMART" MICE

OVER THERE

A WATCHDOG FOR EURO FOOD?

EUROPEANS ARE FEELING increasingly uneasy about food safety these days. In recent years, diners have dealt with mad-cow disease, dioxin-ridden chickens in Belgium, recalled Coke, and attempts by U.S. companies to export genetically modified "Frankenstein foods," as opponents call them.



So the new president of the European Commission, Romano Prodi, wants to calm consumers—and skirt a trade war—by creating a strong European food-safety agency, "an independent European

food-and-drug agency to help win back consumer confidence," says Prodi. It will be modeled after the U.S. Food & Drug Administration.

Drug and biotech companies such as Monsanto and Novartis like the idea of a pan-European regulator, which they think could help depoliticize food-safety issues. Many European countries, for example, feel Britain's then-Prime Minister John Major was slow to deal

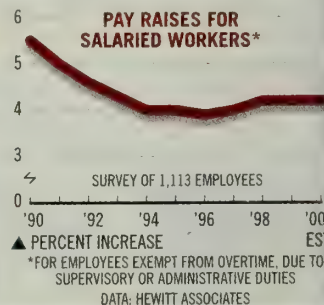
with mad-cow disease.

So expect Prodi to formally propose the idea in the shortly. As far as rules about food go, the U.S. and Europe could soon be dining at the same café. *William Echikson*

THE BIG PICTURE

SHOW YOU THE MONEY? IT'S WITH VARIABLE PAY

Big raises aren't in store in 2000. But companies will spend 16% more on performance-related bonuses. That spending will total 9.6% of payroll next year, up from 8% in 1998.



FOOTNOTES Predicted e-commerce site visits by 1999 holiday shoppers: **1.3 billion**; number of transactions: **144 million**

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DON'T CONFUSE NSI WITH A MONOPOLY

"What's in a name.com? Plenty" (Legal Affairs, Sept. 6) correctly identified many important issues about the future of the Internet. Unfortunately, the article also contained several misperceptions about Network Solutions Inc. (NSI).

NSI does not have a government contract for domain name registrations. NSI entered into a cooperative agreement with the National Science Foundation (since transferred to the Commerce Dept.) that provided NSI the opportunity to register names in four domains. NSI invested the more than \$250 million in hardware, software, and highly trained personnel to meet the explosive growth of name registrations. NSI had to take all the risk including legal liability.

NSI does not have a monopoly on domain name registrations. NSI did have the exclusive right to register names in four of the 250 domains currently available. Through hard work and investment, it turned that opportunity into a thriving business. But today, even those four domain names are open to competition. In fact, one of NSI's competitors just announced that it has signed up its 1 millionth customer in the dot.com domain—a number equal to almost 20% of NSI's entire customer base.

The intellectual property developed by NSI while registering domain names is not public property. It belongs to NSI under the terms of the cooperative agreement. As with thousands of other companies and universities that have entered into agreements with the National Science Foundation, information developed as a result of original work and private investment belongs to the originator, not the government.

Finally, after working nonstop for four years to develop and maintain key infrastructure that makes the Internet work reliably and securely, NSI certainly does oppose efforts that would allow the system to be disrupted by political wrangling. We owe it to our more than

5 million customers around the world not to let that happen, and we take our business responsibility very seriously.

Michael A. Date
 Chairman
 Network Solutions Inc.
 McLean, Va.

SHED NO TEARS FOR THE IPO TYCOON

"Inside an Internet IPO" (Cover Story, Sept. 6) was fascinating reading, but please don't expect us to shed tears of sympathy for the "five weeks of pure boredom" and the two weeks of "excruciating" early mornings and late days for the owners to land their multi-hundred-million-dollar windfalls. They need to spend a day following a nurse on an intensive-care unit on a 10-day shift (with no stock options) to understand words like excruciating and to be more grateful for their compensation. And a few sleepless nights in the lab with underpaid biomedical researcher struggling to get a grant application approved for a cancer study might help put their own nights of suffering in a better perspective.

No one should begrudge the choice of financial successes of the entrepreneur. Just don't describe this roller coaster experience of an IPO in such mythic and tragic human terms.

Ronald S. Newbrow
 Acton, Mass.

IS BARAD IN OVER HER HEAD AT MATTEL?

Street-smart investors bailed out Mattel Inc. stock months ago, and the analysts, burned in 1998, won't be fooled again soon ("Searching for Turbulence Around Barbie," The Corporation, Sept. 6). Unfortunately for Mattel and its shareholders, the worst is probably yet to come.

Throughout her tenure at Mattel, CEO Jill E. Barad has made numerous assumptions that could continue to have disastrous implications for the toymaker. Not the least of which is the assumption

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ORRECTIONS & CLARIFICATIONS

The illustrated gatefold accompanying "Read carefully," (Special Report on Global Investing, Sept. 13) in some editions erroneously showed the former British colonial flag of Hong Kong instead of the current one.

"Perking up PICO" (Inside Wall Street, Sept. 20), investment firm M. J. Whitman as incorrectly identified as J. Whitman. In the same column, "Genesis: A strong start on the Web" inadvertently dropped a word. It should have read "Also, JWG acquired Genesis Merchant Group Securities last year for \$15.8 million—and this year sold its institutional sales and research unit for \$4 million and its clearing operations for \$59 million."

At \$3.5 billion, the acquisition of Learning Co. is somehow good for Mattel. The brands at the Learning Center are ancient in software years and feature fairly generic characters.

Moreover, because of the generic makeup of the Learning Center brands, the margins earned on the current billion in sales will begin to erode. The next wave of educational software development will incorporate new technologies with better, more interesting characters who already appeal to the target market and their parents.

Meanwhile, the market for used educational CDs will continue to grow, as their quality grows and the initial users graduate to higher forms of computer entertainment. Mattel, like makers of board games, will not share in this market. Although Barad is an excellent marketer, she is in over her head.

Stephen M. Stauning
St. Joseph, Mo.

THE RIGHT WAY TO RUN A CREDIT-CARD COMPANY

In "A panic over plastic" (News Analysis & Commentary, Sept. 6), I was intrigued with interest about abuses of the late-fee charge. There is a very simple solution to the problem that is fair to both parties: Scrap the requirement that payment must arrive at the credit-card company by a certain date. Instead, require that payment be postmarked before the deadline.

One complication is that the time between mailing out the statement and the payment-due date has shrunk. As a result, many problems arise because of postal delays. Using the postmark date would avoid such mix-ups.

W. Allen Johnson
Ocala, Fla.

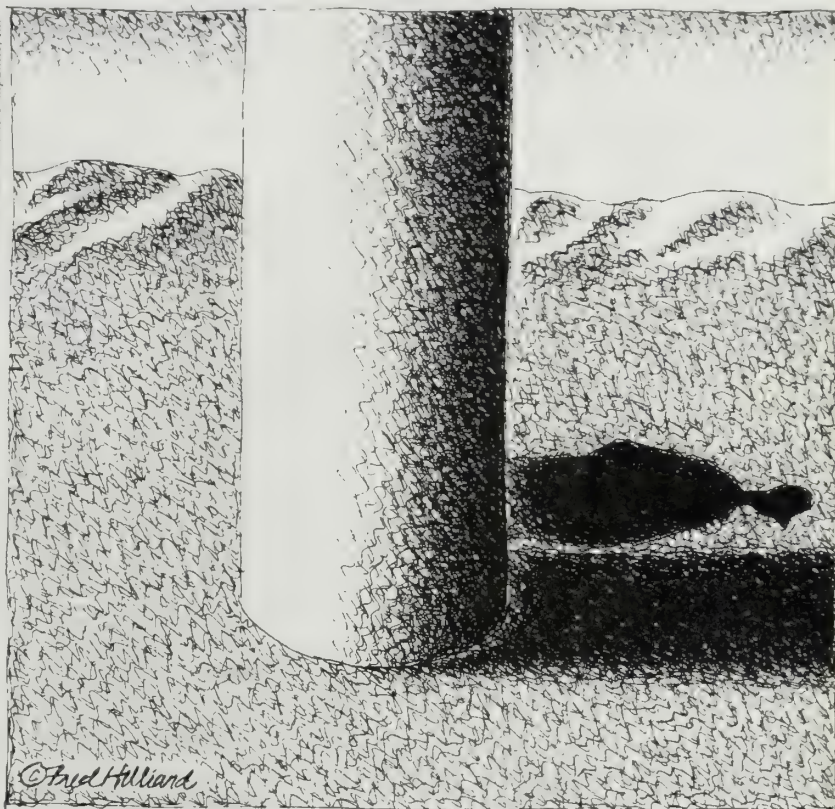
Congress will soon be voting on the latest "revision" to the U.S. Bankruptcy Code. Defeated once by a Clinton veto, this one is veto-proof. This law is nominally intended to stop consumer abuse of the system. Using Internal Revenue Service parameters, a means test is intended to stop many consumers from filing a simple Chapter 7 and force them to file a complicated Chapter 13 repayment plan. Effectively, this will let the credit-card companies salvage some of their losses.

There is abuse in the current sys-

tem, but, as in most cases, it is not just one party who is at fault. Have you ever wondered why you get numerous solicitations for credit cards in the mail even though you already have more than one credit card? It is because there is profit in it for the card companies.

A simple way to stop consumers from this destructive behavior would be to limit them to one credit card—but then you would put a wrench in the mighty credit-card machine. Yet the machinery is already in place for the banks to stop

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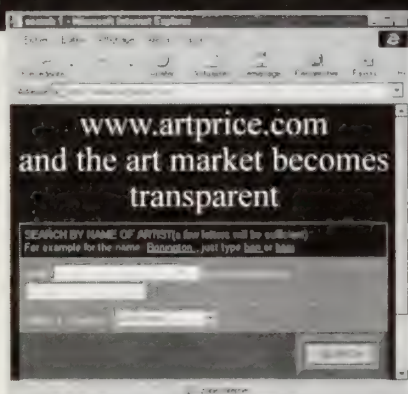
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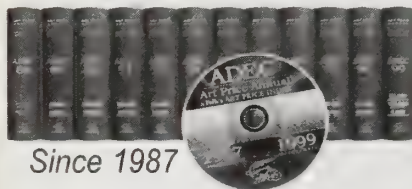


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Readers Report

multiple card issuance. Banks do not lend in other circumstances when the borrower is overloaded with debt.

I tell my clients credit is like alcohol and guns—wonderful when used properly but deadly when abused. The current law works fine. Changing it is just going to make our job more expensive and pass the cost on to those who can least afford it.

James E. Kuttler
Aurora, Colo.

ECONOMISTS PREDICT, THEREFORE THEY EAT

Robert Kuttner makes a good point in "What do you call an economist with a prediction? Wrong" (Economic Viewpoint, Sept. 6). However, I would suggest a sequel entitled "What do you call an economist without a prediction? Unemployed."

The key reason that economists predict and, therefore, that economists are always wrong are that 1) the clients of economists demand that economists know the future, and 2) economists have to feed their families just as normal breadwinners do. I challenge Mr. Kuttner to name one economist in a senior nonacademic position who survives professionally without making predictions.

George P. Roniger
New York

WHAT THE NEW MILLENNIUM WILL BRING

My vote for the 22nd idea for the 21st Century would be the empowerment of women in politics, business, religion, higher education, science, law, and medicine ("21 Ideas for the 21st Century," Cover Story, Aug. 23-30).

As Idea 3 predicts, the next century belongs to the best and the brightest, working in teams with talented leaders. Women are particularly good as team builders, working toward a consensus as opposed to hierarchical management. This is true in all fields of endeavor. Women have been living by their own clocks forever, so they should fit right in to Idea 5's timeless scheduling, and because they will have fewer children, according to Idea 16, they will have more time to devote to their careers. Females will also fit beautifully with Idea 17 by political campaigning over the Internet at a younger age, when they are still rearing children. The remainder of the ideas should also benefit women as well as men.

As you state, smart managers and leaders will pursue several paths at once

to maximize their options. That's what we women are best at.

Laurel Anderson
Executive Director
Women's Campaign Society
at Yale University
Trumbull, Conn.

It is a shame your writer for education did not interview someone who could give a more realistic picture of the challenges facing a responsive high school. The demand on today's relevant high schools necessitates more time for their clients—not more. Expanding basic knowledge, technology, multi-lingualism, human relations, financial education, and community service will require more time and resources and better staff training.

To conclude by citing some social conditions (proms, rallies, etc.) as benchmarks reminds one of the adage that you can't get out of life what you put in to it. That's what a few adolescents may have learned. They will enjoy and get out of life more now and tomorrow. Even colleges.

Norm Goldring
Pennington, N.J.

HELPING KIDS WITH ACHING BACKS

I congratulate you for "Mom, my back really hurts," (BUSINESS WEEK LifeStyle, Aug. 16), which addresses a problem that has been largely ignored by the computer industry and computer journals. Back injuries and repetitive stress injuries associated with sitting and computing have reached epidemic proportions with adults, and concerns are growing about similar injuries among children.

In addition to ergonomically correct computer workstations and backpacks, children need school chairs and desks that promote good posture. They sit for up to seven hours a day in hard wooden or plastic chairs. Other countries have taken steps to improve children's "workstations." A nationwide campaign was proposed in Britain to teach kids proper posture related to ergonomics. American schools should address this problem today to prevent unnecessary injury to our children.

Eric Schlossberg
Berkeley, Calif.

INFLATION IS NEVER 'BENIGN'

"Will the Fed keep turning down the flame?" (Business Outlook, Sept. 6) is in keeping with your high standards. I found it useful as always. I must nonetheless take issue with one point.

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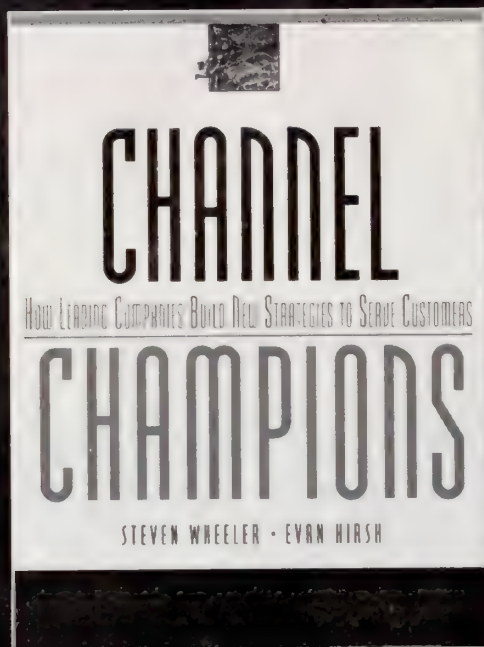
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Readers Report

not the main thrust of your report but to me an important one.

You say "consumer prices were rising at a benign 2.1% yearly pace." There is nothing benign about inflation of 1.1%. At that rate, prices double in 33 years. If you retire at 60, and you live on fixed income, you will find buying power cut in half by the time you are 93.

When modern inflation first started to soar, after World War II, this was used to be talked about all the time. It is only in light of what has happened since then that 2% inflation seems benign. In 1950, the average rate of inflation (in Britain and Canada) over the preceding 300 years had been essentially zero. Significant swings resulted from wars and subsequent depressions but over the long run, zero.

I have never read anything that says zero inflation is a bad thing. On the other hand, I have read much and learned from my own experience that anything greater than that is bad. It hurts people on fixed incomes, and that is an ever-growing part of the population.

G. A. Campbell
Vancouver,

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BY STEPHEN H. WILDSTROM

THIS PALM RATES A HIGH-FIVE

The Visor offers plug-and-play access to a wide range of applications

After the original PalmPilot made its debut in 1996, even its designers were amazed by the variety of inventive programs that software developers wrote for the simple platform. Now the inventors of the Palm are back with a new product that promises a similar wave of hardware inventiveness.

The Handspring Visor, made under license from 3Com Corp.'s Palm Computing, is obviously a first cousin to the Palm III. Unlike the Palm, it comes in five colors and is about 1/4-inch narrower, making it more comfortable in smaller hands. But the Visor has the same high-contrast screen used in the latest Palms, the same buttons, and the same shape. And it uses the same Graffiti shorthand for data entry.

Visor offers all standard Palm software, plus some enhancements. DateBook+ adds expanded views of your schedule, including a detailed work-week view and a full-year calendar. And the calculator adds scientific, statistical, and financial functions to the basic Palm model. Like the Palm, Visor offers the same easy one-button synchronization of information with PCs or Macintoshes. The basic Visor with a 2-megabyte memory sells for \$179 (\$149 without the sync

cradle used to connect with a PC), while the Visor Deluxe, with four times the memory, is \$249. The 2-MB Palm IIIe goes for just under \$200.

QUICK SWITCH. To see the Visor's most exciting feature, you remove a plastic cover from the back, revealing a slot about 2-inches square and 1/4-inch deep. The slot, called the Springboard, provides for a wide array of accessories, from memory modules that quickly add new programs, to more complicated hard-

VERSATILE: The Visor can quickly convert to a cell phone or use a probe to read the temperature

ware that converts the Visor into a cell phone, global-positioning system receiver, or an MP3 music player. Although the Visor has no audio system, a microphone is built into the unit for devices, like the cell phone module, that need it.

The only module available for me to test prior to the Visor's launch was *Tiger Woods PGA Tour Golf* from Electronic Arts Inc. While computer golf leaves me cold, the game demonstrates one of the Visor's neatest features. When you plug in the module, Tiger appears on Visor's applications menu. When you remove it, he disappears. No

installing, no downloading, no uninstalling. The effect is to give the Visor effectively unlimited memory with instant installation and removal of programs.

The hardware accessories, which will be coming to market over the next few months, have the potential to be far more interesting. RioPort and InnoGear plan MP3 modules, Navicom and MarcoSoft Inc. are working on GPS receivers, and Innogear and Sycom Technologies plan voice recorders.

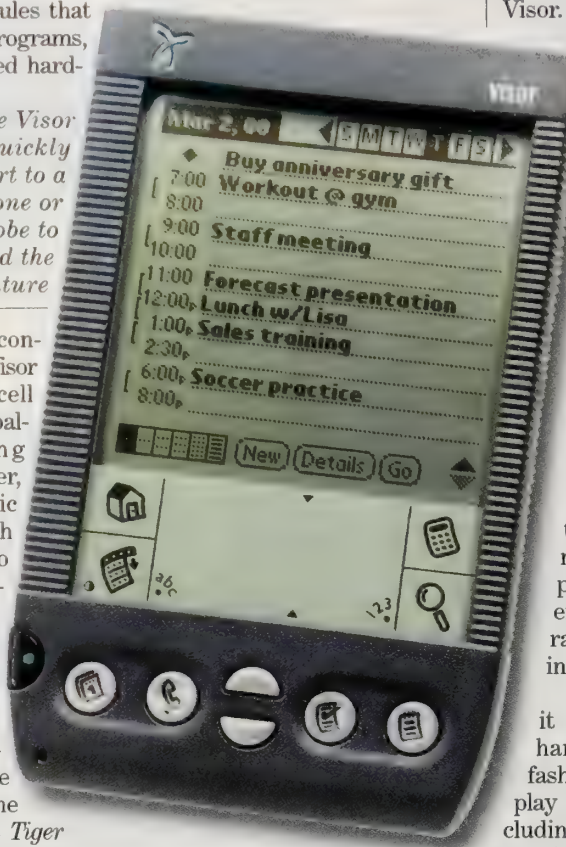
Communications options offer some of the most promising long-term possibilities. The wireless Palm VII, which barely has room inside for one radio, is locked into using a single network technology.

browsers, or any other applications to use whatever communications module is plugged into the Springboard. Another plus: The Springboard design makes it easy for modules to provide their own batteries, a necessity for power-hungry wireless communications, without greatly expanding the size of the complete package.

Another product planned for this fall, the Sensor Science Kit from ImagiWorks (800 929-6767 or www.imagiworks.com) shows Visor's versatility. The kit allows scientific sensors, such as the temperature probes recently used with PCs by Texas Instruments Inc. calculators, to connect to the Visor. The first offering combines a temperature

probe with a set of software-based experiments in home science expected to retail for between \$40 and \$80. Additional probes with their own project may cost as little as \$20. "We're taking advantage of everything Handspring giving us," says Chairman Wayne Grant of ImagiWorks. "There are lots of opportunities to expand into new markets." Among the products being considered is a wireless heart rate monitor for use during exercise.

Handspring is making it as easy as possible for hardware designers to fashion their own plug-and-play Springboard devices, including freedom from any licensing requirements or royalty payments. It was just this sort of openness that produced an undreamed explosion of software for the Palm. If that experience is any guide, expect some really interesting ideas to emerge on the Visor.



But the Visor can handle plug-and-play modules that would let you choose any wireless or wired voice or data network. And software developer JP Systems will supply a program that will allow mail programs, Web

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TALK ABOUT THROWING THE BULL

There's an old saying on Wall Street: When a bull appears on a magazine cover, sell your stocks and ride for the hills. Yet in the last 17 years, the Dow Jones industrial average managed to gain 1,300%, to over 11,000, despite countless charging bulls on the covers of BUSINESS WEEK and other magazines. Maybe that old saw has been tried for good. Still, with the stock market having gone so far and stocks trading at valuations never seen before in the U.S., you have to pause at what's coming out of the publishing presses this month: three books with aggressively more provocative titles: *Dow 36,000*, *Dow 40,000*, and *Dow 100,000*. That's a series of book jacks that makes a moping bull on a magazine cover seem more like a bobbly-legged calf page 109.

Of course, there are perfectly good reasons why the stock market has performed so well all these years. The extraordinary economic backdrop includes a booming economy, low inflation, rising corporate profits, low unemployment, and, perhaps even more amazing, a U.S. federal budget plus. In short, conditions are about as good as most of us can imagine them ever getting, and we've already reached over 11,000. What has to happen in the U.S., inside corporations, or around the globe to get us to three or four or even times the current level? Actually, conditions don't have to get

a lot better to justify Dow 36,000, say James K. Glassman and Kevin A. Hassett in *Dow 36,000: The New Strategy for Profiting From the Coming Rise in the Stock Market*. They argue that the market already merits 36K, and that

stock prices will advance toward that target over the next 3 to 5 years as investors come to that conclusion, too.

Most market mavens, even the bullish ones, do worry about sky-high valuations. The stocks in the Standard & Poor's 500-stock index, a far broader measure of the market than the 30-stock Dow, sell at more than 30 times last year's earnings. This is double the long-term average and 40% higher than in the early 1960s, another era of strong economic growth and low inflation.

Don't sweat it, say Glassman and Hassett. Be bullish, because the market—even at a price-to-earnings ratio of 30—is a steal. By their estimates, a "perfectly reasonable price" for the market—they use this term continuously in their book, usually abbreviated as PRP—is 100 times earnings. To put that in perspective, consider that the

enormously profitable and near-monopoly Microsoft Corp. trades at 66 times earnings.

Glassman, a *Washington Post* columnist and fellow at the American Enterprise Institute (AEI), and Hassett, an economist and resident scholar at the AEI, first put forth their bold thesis in a *Wall Street Journal* op-ed piece last year. Believe me, as an aging baby boomer who'll one day have to retire on the proceeds of my 401(k) account, I want to be persuaded. Unfortunately, their argument is no more convincing



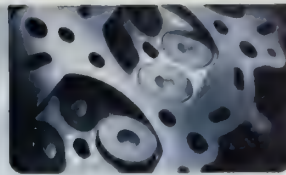
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It's ludicrous to conclude that a stock's estimated cash stream is worth the same as predictable bond payments

as a book than it was as an article.

The problem with their thesis is that to arrive at Dow 36,000, you have to accept their proposition that stocks are no riskier than bonds. And that flies in the face of what economists and B-School finance professors have been saying for decades. It also runs counter to what we observe in the market every trading day. Stocks are risky. After all, we have seen big companies lose 20% or 30% of their market value in hours because earnings came in a few pennies shy of analysts' expectations.

The argument also runs counter to what we know about corporate finance. The lenders—first the banks, and then bondholders—have first dibs on a company's cash flow. Stockholders only get paid, with earnings and perhaps dividends, if there's anything left over. In other words, bondholders have a far higher probability of getting paid. They know both the amount they will get paid and when payments will come. A stockholder may ultimately reap riches, but the timing is anything but certain. So it's not unreasonable to conclude that stocks are riskier than bonds.

Glassman and Hassett get around the short-term volatility of stocks by focusing on the long-term behavior of stocks in general. They point to the work of well-known market expert Jeremy J. Siegel, a finance professor at the Wharton School, to argue that there never has been a period of 17 years or more since the beginning of the 19th century that has not produced positive returns after inflation. Their reasoning: As long as you hold a diversified portfolio for a long time, stocks are not a risky investment. That's not a very radical idea, and in fact, it is one of the reasons why people are advised to invest in stocks for long-term goals such as retirement.

But where Glassman and Hassett deviate from convention is in their assertion that since there hasn't been any more risk in owning stocks over bonds in nearly 200 years, there never will be—and that stocks therefore deserve much richer valuations. After all, they

ask, wouldn't you pay more for an investment that had less risk?

To some degree, yes. And there's no arguing that in the equity-friendly climate we're enjoying today, investors can afford to—and do—pay more. But Glassman and Hassett conclude that the estimated cash stream that may come from a stock is worth the same as predictable payments an investor can get from a bond. And that's just ludicrous. Rational

investors will always compensate for uncertainty by discounting the price they'll pay for an investment. That way, they're more likely to achieve a desired return.

In contrast to *Dow 36,000*, the other books don't ask their readers to toss out what they know about finance or make grandiose assumptions about risk. *Dow 40,000: Strategies for Profiting from the Greatest Bull Market in History* pre-

dicts that the Dow will reach 40,000 in 2016. Author David Elias, who runs his own money-management firm in Williamsville, N. Y., takes an upbeat view while making a lowball forecast. All it will take to reach his target is a 9% average annual gain in stocks. That's two percentage points below the average.

Charles W. Kadlec, author of *Dow 100,000: Fact or Fiction*, is not making all that much bolder of a prediction. Kadlec, chief investment strategist for Seligman Advisors Inc. (and a onetime BUSINESS WEEK correspondent), puts the Dow at 100K in 2020. To jump that hurdle, the market need only gain an average of 11.1% a year, which is just slightly above what large-company stocks have done during the past 70 years.

Both Elias and Kadlec take readers

down familiar routes discussing some of the fundamental forces that are driving the long-term market: lower tax rates, increased globalization, aging of the baby boom generation, the end of the cold war, the spread of capitalism, and rapid technological advances. If you already know the story. As for the stock recommendations, you can find them anywhere.

Kadlec, who has written the more eloquent of the two books, calls the new era the "Great Prosperity" and warns there's more risk to your financial health in being out of the market than in it. For the stock market to stay on the road to Dow 100,000, he writes, the historical forces that have powered the bull market must remain firmly in place. Some of them, like the technological revolution and the aging boomers, are not going away. The other trends are likely but less certain: the end of the cold war and the avoidance of a national emergency, the continued global spread of freedom and democracy, and global economic competition among governments. Of course, trend is not destiny, and conditions can change. Kadlec warns investors to watch for

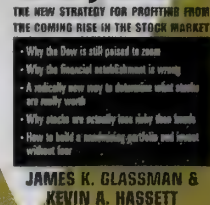
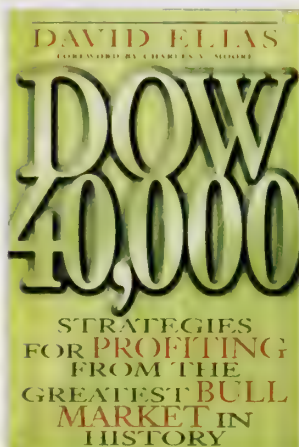
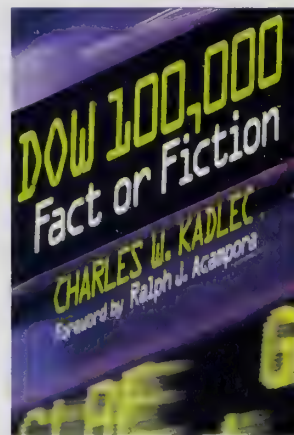
move toward higher taxes, protectionist trade policies, or global monetary instability.

Any of those factors would be the result of misguided fiscal, monetary or trade policy. And Kadlec believes that bull markets die not from old age but because of policy errors. So if, in years to come, the market gets waylaid, you could blame it on a clueless Congress or clueless central bank. But do blame the authors of *Dow*

36,000, *Dow 40,000* and *Dow 100,000*. That would be giving them more influence than they really have.

BY JEFFREY M. LADERMAN

Senior Writer Laderman has covered the bull market for BUSINESS WEEK since 1982.



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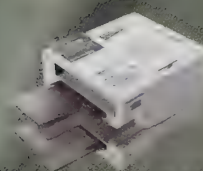
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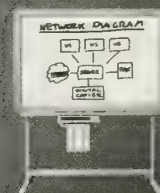
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BY ROBERT J. BARRO

DOES ABORTION LOWER THE CRIME RATE?



EXPLOSIVE:
A new study contends that falling crime in the 1990s is due to the rise in abortions after *Roe vs. Wade*

Crime in the U.S. has fallen dramatically since 1991. By 1998, the homicide rate was down by more than one-third, and the rates for all violent crime and property crime were each down by around one-quarter.

Many explanations have been offered for the decline, including increased expenditures on prisons and police, better policing strategies, the strong U.S. economy, and the diminished role of crack cocaine. Spending on prisons and police has been increasing since the 1970s, however, so this factor therefore does not explain why crime rose until 1991 and then fell sharply. Better policing methods, as promoted by Mayor Rudolph W. Giuliani in New York, may be making a difference. But crime rates also fell substantially in Los Angeles and the District of Columbia, which are not renowned for their policing skills. As to the strong economy, it is hard to show generally that growth in income and employment leads to less crime. For example, the economy performed well from 1983 to 1989, while national crime rates rose. Finally, the fall in crime rates after 1991 occurred in places where crack cocaine had never been much of a factor.

A recent study, "Legalized Abortion and Crime," by Professors John Donohue of the Stanford University Law School and Steven Levitt of the University of Chicago, proposes a new causal factor: the legalization of abortion in the early 1970s. The idea is that the children who were not born would have been disproportionately likely to grow up in poverty and on welfare with a young and poorly educated single parent. Because these factors are known to breed crime, the children not born would have been prime candidates to be criminals 15 to 25 years later. Hence, the absence of these children contributes to the drop in crime rates since 1991. My reactions to this idea: (1) This is a surprising hypothesis. (2) It may well be correct. (3) The implications are explosive politically and are likely to cause a major ruckus.

TIMING. Donohue and Levitt present three types of evidence to support their theory. First, the sharp rise in legal abortions—from fewer than 750,000 in 1973 to a plateau of around 1.5 million a year since the early 1980s—fits with the timing of the drop in national crime rates since 1991. The cumulative effect from abortions 15 to 25 years earlier

can also explain why the national crime rate continued to fall through 1998 and is predicted to keep falling for a further 10 to 20 years. In fact, the authors estimate that the number of abortions and the consequent reduction in crime would have been significantly greater had not the 1976 Hyde Amendment, which restricted federal funding of abortions through Medicaid, been in effect in various forms.

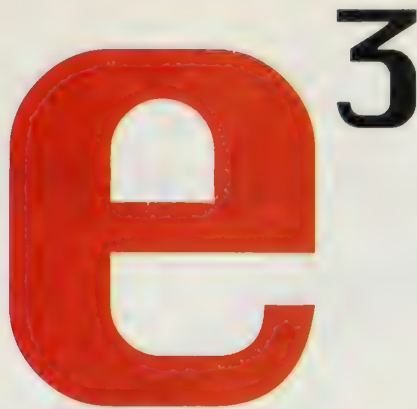
Second, a few states, including New York and California, legalized abortion by three years before the U.S. Supreme Court's *Roe vs. Wade* decision in 1973. As the study implies, the early legalizers experienced falling crime rates sooner than the rest of the country. Finally, abortion rates responded to legalization differently across states, and together with the highest rates of abortion in the 1970s, experienced the sharpest drops in crime in the 1990s.

WEEDED OUT. The researchers estimate that for every 1,000 extra abortions in 1973-1976, there were 380 fewer property crimes, 50 fewer violent crimes, and 0.6 fewer murders in 1997. Overall, the abortion effect accounted for one-half of the drop in crime from 1991 to 1997. The rest is explained by increases in prisons, police, and other factors that goes unexplained.

About 20% of the abortion-related drop in crime arose because of the reduced population of 15-to-24-year-olds (the high-crime group) in the 1990s. The main effect, however, is the reduced frequency of crime among those in the 15-to-24 age group who did not have to be born and grow up. Apparently, abortion particularly weeded out the children who would have been likely to follow criminal careers.

Donohue and Levitt argue reasonably that they are carrying out objective scientific research about the determinants of crime and that the policy implications can be left to others. The effect on crime, even if confirmed by further study, would probably not moderate the views of pro-lifers, who view abortion as murder. Similarly, the evidence would have little influence on pro-choice advocates, who readily view a woman's right to an abortion as a fundamental liberty. But for people with less extreme views, including me, the policy implications could be important. If abortion rights turn out to be a strong crime-fighting opinion, it is likely to move in favor of these rights.

Robert J. Barro is a professor of economics at Harvard University and a senior fellow of the Hoover Institution (rjbweek@harvard.edu).



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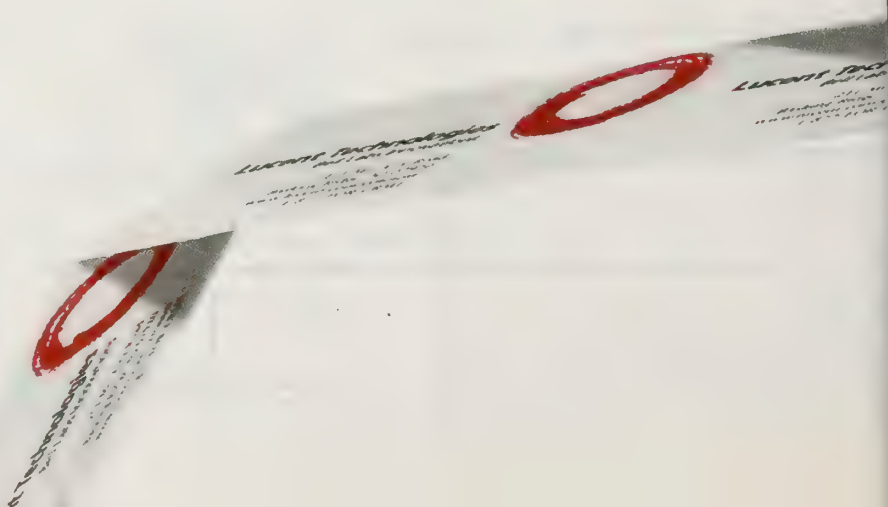
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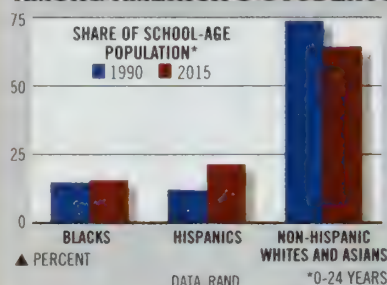
BY GENE KORETZ

ETHNIC GAPS ON CAMPUS

Will they hamper future growth?

A major factor in the nation's amazing job performance in recent decades has been the rising educational achievement of working Americans. From 1980 to 1997, the economy added 34 million jobs filled by workers with at least some college, even as it shed 7 million jobs filled by high school dropouts. Meanwhile, the share of 25-to-29-year-

SHIFTING TIDES AMONG AMERICA'S STUDENTS



olds with high school diplomas has jumped from 75% in 1970, to 88% today, with two-thirds of high school grads now college-bound.

All of this should bode well for America's economic performance in the new century. The problem, claim Georges Vernez, Richard A. Krop, and the late C. Peter Rydell in a recent RAND Corp. study, is that trends related to the shifting ethnic makeup of the nation's population seem far less favorable. Specifically, the lagging post-secondary-school attainments of two growing minorities—Hispanics and blacks—suggest that the share of Americans with college training entering the labor market could actually start to decline within two decades.

By 2015, the study projects that Hispanics and blacks will account for one-third of the school-age population (and of new entrants to the workforce), up from one-fourth in 1990, while non-Hispanic whites will fall to 58% of the total, and the small but fast-rising Asian group will climb to 6.2%. The biggest increase will be among Hispanics, the majority of whom are of Mexican origin, a group with a particularly poor record of educational attainment.

While Hispanics and blacks have made big strides in high school gradua-

tion levels in recent decades, the researchers note that they've made little progress in closing the gaps between their college graduation levels and those of non-Hispanic whites. If this pattern continues, they warn, these gaps will widen and by 2015 the share of adults entering the labor force with college degrees will be lower than in 1990.

In California, with its soaring Mexican population, disparities will be especially sharp. By 2015, Hispanics and blacks will account for 40% of the state's population and 75% of its high school dropouts, while whites and Asians will account for 90% of college grads.

What can be done to remedy this situation? The researchers estimate that added resources—mainly by colleges—to bring minority achievement up to white levels would cost the nation about \$23 billion a year. But they also find that such costs would be recouped within a decade or so via lower outlays for income transfer and social programs utilized by poorly educated minorities.

Increasing educational capacity, of course, is only part of the answer. "Greater resources would help a lot," says Vernez, "but we must still find ways to improve minority educational preparation and demand for college."

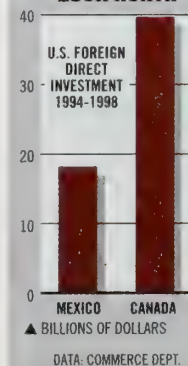
THE REAL NAFTA WINNER

Canada leads the investment race

Although U.S. capital was expected to pour into Mexico in the wake of the 1994 North American Free Trade Agreement, it hasn't quite worked out that way, notes economist Joseph P. Quinlan of Morgan Stanley Dean Witter. To be sure, U.S. foreign direct investment in Mexico has risen from \$11 billion in the decade prior to NAFTA's inception to \$18.1 billion from 1994 through 1998. But Canada has garnered \$39.6 billion in the same period.

While much of the Canadian figure reflects re-invested earnings accruing from America's big historical investment position in Canada, Quinlan points out that U.S. equity flows to Canada

U.S. COMPANIES LOOK NORTH



have also exceeded those to Mexico by 50% in the past five years. And for this reason, he says, is that NAFTA has fostered a more relaxed attitude in Canada toward foreign direct investment in formerly protected sectors of its economy such as natural resources, telecommunications, and financial services.

CUTTING BACK ON TOBACCO ADS

Not every ban lowers consumption

How much do limits on tobacco advertising reduce smoking? The question is particularly pertinent to

A recent European Commission directive requires European Community member states to ban all forms of tobacco advertising except point-of-sale by the fall of 2006. Meanwhile, as a result of the U.S. tobacco industry's settlement with the states, cigarette makers have agreed to add a ban on outdoor advertising to the existing bans on radio, and movie advertising. They also contribute \$300 million annually over five years for public education to tobacco use.

In a new National Bureau of Economic Research study, Henry Saffer and Frank J. Chaloupka estimate the effects of these measures. Past bans on some forms of cigarette ads, they note, have been offset by increased outlays in other media. Thus, total U.S. tobacco-industry spending fell after cigarette advertising on broadcast media ended in 1991 but it soon returned to earlier levels.

An econometric analysis of the effects of various bans on tobacco advertising imposed in 22 industrial countries from 1970 to 1992 underscores the significance of this pattern. The two researchers find that only comprehensive ad bans covering a wide variety of media tend to reduce overall advertising expenditures and the level of tobacco use. Thus, they estimate that the stringent European ban set to go into effect in late 2006 will cut tobacco consumption in the EC by about 6.9%.

In contrast, Saffer and Chaloupka believe ending outdoor advertising will have little effect on U.S. tobacco use since cigarette companies are likely to increase spending on print and point-of-purchase advertising and on sponsorships of sports and other forms of promotion. The industry's contributions to "counteradvertising" on smoking dangers, on the other hand, could cut consumption by as much as 2%, they say.

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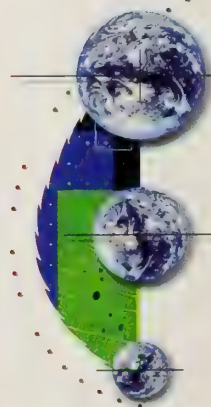
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COULD THAT BE AN INFLATION CLOUD?

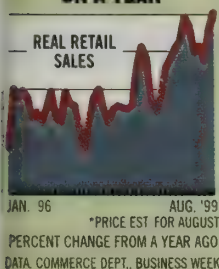
Hot demand and global recovery may bring price pressures next year

U.S. ECONOMY

Pretend you're a policymaker at the Federal Reserve, and your job is to worry about inflation next year. No problem, you think. Inflation has been all but dead for so long that trying to whip up any worries about it seems pointless. But think again. The inflation outlook is shifting, subtly but undeniably.

The biggest changes come from the reversal of the global factors that have helped to hold inflation down over the past two years. Fed policymakers have alluded to temporary international conditions—falling oil prices, the strong dollar, and cheaper imports—as primary restraints on U.S. inflation. Those beneficial factors are ending their runs now that prospects in Europe, Japan, and the rest of Asia are improving (page 44).

CONSUMERS ARE STILL ON A TEAR



Already, stronger foreign demand is lifting commodity and supply prices. Firmer exports have also boosted U.S. manufacturing output, which had been the one area of the economy that had slowed last year. Yet at the same time, vibrant July and August retail sales data show that consumer-led domestic demand is not cooling off (chart). Until

it does, the labor market—the Fed's main concern—will likely continue to tighten.

In addition, because foreign investments are starting to look more attractive relative to U.S. investments, the dollar has weakened somewhat, especially vs. the yen. As a result, import prices have stopped falling. And further downward pressure on the dollar seems unlikely, since currency traders may be taking a closer look at the U.S. current account deficit—a summary of U.S. international financial obligations—which hit a record high in the second quarter.

...L THIS IS NOT TO CONCLUDE

that the Fed will move again at its Oct. 5 policy meeting. But these shifts in the inflation landscape will not be going away anytime soon. If these small seeds of price pressures take root, policymakers may have to hike interest rates again, either in late 1999 or early 2000. In fact, they may feel that they have no choice if domestic demand doesn't slow soon.

In the third quarter, though, there are few signs of a

slowdown, especially by consumers. Retail sales in August jumped a larger-than-expected 1.2% from July, on top of an upwardly revised 1% rise in July sales. Even after accounting for higher prices, including the spike at the gas pump, real retail sales are up a blistering 10.1% from a year ago. That's the fastest yearly pace since the U.S. economy was coming out of the disastrous 1981-82 recession.

Purchases of motor vehicles led the August gain, but even excluding autos, retail sales rose a strong 0.7%. Stores selling building materials, apparel, and furniture all posted solid gains. The surprising advance in store receipts means that real consumer spending is on track to grow at an annual rate of 4% in the third quarter, after a sizzling 4.6% gain in the second.

THE WORRY FOR THE FED is that excess demand, if left unchecked, will give businesses the opportunity to raise prices soon. Already, shortages of a few materials are leading to some price pressures at the production level.

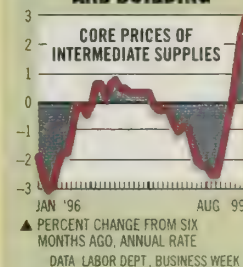
True, the top-line inflation data show no sign of price worries. Producer prices of finished goods rose 0.5% in August, reflecting the 3.7% jump in energy prices. But excluding food and energy, core prices fell 0.1%. And consumer prices in August rose a modest 0.3%, mainly because of a large 2.7% increase in energy costs. Core prices were up only 0.1%. Core consumer prices are rising at the slowest yearly pace in 33 years.

But further back in the production process, companies are facing higher costs. And it's not just oil, which soared to more than \$24 per barrel in mid-September. Core prices of intermediate supplies, such as plastics, paper containers, and chemicals, are edging higher. In August, they were up at an annual rate of 2.9% from six months earlier (chart), the

fastest in any such period in four years. And core commodities are up a surprising 10%. The price hikes reflect the competition among businesses for a limited amount of resources. For example, the surge of homebuilding has caused a 20.1% jump in gypsum prices.

When faced with higher input costs, producers must decide to swallow the price hikes and take a hit on the

WHERE PRICE PRESSURES ARE BUILDING



bottom line, or they must raise their prices. What the Fed knows is that when a business enjoys a strong market for its product, raising prices is a whole lot easier. That's why the recovery in foreign economies, which will lift the demand for U.S. exports, adds to the Fed's fears that the U.S. economy is overheating.

MORE IMPORTANTLY, the rebound in foreign economies spells the end of one of the chief restraints on U.S. inflation in this expansion: the strong dollar.

From early 1997 to August, 1998, the dollar soared 16.8% on a trade-weighted basis, with nonoil import prices falling 5.6%. Since then, though, the greenback has slipped 8.5%. Consequently, nonoil import prices, whose steep decline was greatly responsible for keeping a lid on goods inflation, have been flat since April. Import prices will likely rise if the dollar weakens further. And right now, that seems a good bet, as the global recovery begins to lure money away from dollar-based investments in the U.S.

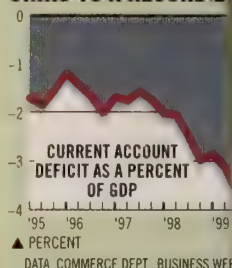
The trouble is that the U.S. has become very dependent on foreign capital. The U.S. current account deficit—the tally of the trade deficit and other international financial obligations—soared to \$80.7 billion in the second quarter, up from \$68.7 billion in the first quarter. That financing requirement, which is essentially the shortfall between U.S. saving and U.S. investment, hit a record 3.6% of gross domestic product in

the second quarter, surpassing the previous peak in 1986 (chart).

That's getting close to the point where the ability of a debtor nation to service its obligations is called into question. As long as prospects for U.S. growth and inflation remain bright, the U.S. remains the only country with the financial might to carry such a large current account gap, especially given the boost to savings from the federal surplus. Still, investors are beginning to believe that overseas investments are becoming more secure and with bigger potential payoffs. That monetary enticement will cause some to sell off their U.S. investments, which will add further downward pressure on the dollar.

The consideration of the dollar and import prices points to a key way in which Fed policy has changed in this expansion. For years, policymakers preferred to ignore—or be indifferent to—international turns of events. No more. The inflation benefits from weak global economies are dissipating. And that change goes a long way in explaining why the Fed will be on high alert even while the top-line inflation numbers remain nonthreatening.

THE CURRENT ACCOUNT SINKS TO A RECORD LOW



AUSTRALIA

TIE ME ECONOMY DOWN, BOYS

Australia's growing economy is creating jobs, while scant inflation is keeping interest rates low, and past labor market reforms are helping boost productivity. The result: The economy has thrived despite its reliance on Asian markets. Moreover, the growth outlook for the coming year is bright—maybe too bright.

The economy will have to slow a notch from its 4%-plus pace to prevent the Reserve Bank of Australia from raising its policy rate, now 4.75%. The RBA is looking ahead to the tax-reform package that carries a stimulus equal to 1% of gross domestic product, which kicks in next July. Also in July, a broad 10% goods-

and-services tax will boost inflation temporarily, but it could also provide a cover for extra price hikes and wage demands, if the economy is still running hot.

Some evidence of slower

growth showed up in the smaller-than-expected 0.2% quarterly gain in second-quarter GDP, led by a steep drop in business investment. Businesses plan to invest 17% less in new plants and equipment in the coming year than they were planning to this

time last year. That primarily reflects cutbacks at mining companies that have been hit hard by the lowest raw materials prices in decades. However, amid firmer export prospects, those cutback

plans could be overly pessimistic.

In fact, it's too early to tell if the second-quarter slowdown in GDP will last. Growth was still a strong 4.4% from a year ago, and early third-quarter reports look solid. The economy posted robust job growth during the past three months. Joblessness rose to 7.2% in August, up from a nine-year low of 7% in July. Amid lower unemployment, the lowest interest rates in a generation, and wages growing about two percentage points faster than consumer inflation—which was only 1.1% in June—consumer spending has strong supports.

So far, wage growth is not a problem, since productivity is increasing at about 3%. But if labor markets continue to tighten amid robust demand, wages and prices could accelerate next year.

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NASSER: FORD BE NIMBLE

He will give the company's brand and regional units more autonomy

By the time Jacques Nasser celebrates his first anniversary as CEO of Ford Motor Co. in January, there will be little doubt that a new regime is firmly entrenched in Dearborn. BUSINESS WEEK has learned that Nasser plans to announce in November a realignment of the sprawling \$143 billion auto maker

that, while not actually repudiating Ford 2000, the strategic vision of predecessor Alex Trotman, will put the company on a different path. Ford 2000 centralized worldwide responsibility for functions such as product development, purchasing, design, and manufacturing—and shifted other decision-making power to the home office.

Nasser wants to keep the efficiencies generated from central thinking about design and production. But he wants to reintroduce the market focus in regions across the globe that will give Ford stronger brands and more appealing products. "Ford 2000 was a good idea carried too far," says a source familiar with the new plan. And no, Nasser is not doing a reorganization. "General Mo-

tors has given reorganizations a bad name," sniffs one Ford exec.

Nasser is "trying to create the Ford 2000 that should have been created in the first place," as one exec put it. The plan translates into a new organizational chart that formally recognizes Nasser's heightened emphasis on the company's brands and gives the various regional and brand units more autonomy. The reason: Nasser wants his top managers to be more entrepreneurial, more accountable for the profits and losses they generate. He also wants each brand to crystallize its own identity with customers. The plan, which still could change, will be unveiled in November and implemented beginning next year.

In one respect, Nasser's move reflects

demands of a global auto business. Chrysler Chairman Jürgen Rempp acknowledges that he, too, is slimming his management.

One of the clearest examples of Nasser's new vision is the plan to split up its North American auto brands, with sales totaling \$87 billion, into "strategic business units," including Ford Car, Ford Truck, and Mercury, say sources close to the company. "If it's different in the mind of the customer, it will have its own [brand] group," explains another source.

NG DIVISION. Nasser's goal is to make Ford more nimble and more close-tuned to customers. "You've got to break down the business into the smallest possible units to give the employees more authority and accountability," says one source knowledgeable about the plan. That applies to Ford of Europe and the company's ailing South American unit, which lost \$226 million a year. Nasser aims to restore to regional Ford managers such as Ford of Europe President Nick Scheele the power that was stripped away by Ford CEO. It's not major surgery, stresses Robert L. Rewey, Ford's group vice-president for sales, service, and marketing. "We're evolving, we're reorganizing."

Since late 1996, when he took over Ford's global auto group, Nasser has been quietly asserting the new vision and eliminating key executive positions. He has also been showing the door to underperformers and reassigning all-star managers from outside—most notably former BMW executive Wolfgang Reitzle, who oversees all Ford luxury brands: Lincoln, Jaguar, Aston Martin, and Volvo. This Premier to Group "was the first step" in Nasser's plan, says one insider. Even earlier, Lincoln-Mercury's relocation to Southern California was a signal of Nasser's intentions. The division's marketers, designers, and engineers have been relocated to the West Coast, far from Detroit's stodgy mind-set.

Now, sources say, Nasser is even considering putting Ford's North American mass-market brand units Ford Car, Ford Truck, and Mercury under a single North American boss. One name being mentioned about is James C. Schroer, Ford's global marketing vice-president. Nasser's charge-ahead style may alarm him to redraw Ford quickly, but it may be upsetting the United Auto Workers, as the two sides negotiate a new national contract. Nasser's plan to

slim down Ford by spinning off \$18 billion Visteon Automotive Systems has rubbed workers at that parts unit the wrong way. Nasser and Ronald Gettelfinger, the buttoned-down UAW vice-president who heads the union's Ford team, are both newcomers to this pressure-cooker environment. This could complicate negotiations over Visteon.

Overseas, Nasser has already installed regional leaders for Europe, South America, and Asia Pacific. His

FORD'S ROAD TO BEYOND YEAR 2000

NOVEMBER, 1993

Alex Trotman becomes chairman and CEO

APRIL, 1994 Trotman announces his "Ford 2000" plan for integrated global operations that are divided along functional lines and not regional or brand lines

MAY, 1994 Trotman brings

Jacques Nasser, then head of Ford Europe, back to Dearborn headquarters to run the new global product-development group

OCTOBER, 1994 The U.S. versions of Ford's so-called world car, the Mondeo, are introduced

JANUARY, 1995 Regional operating units in Latin America and Europe cease to exist as Ford 2000 begins to be implemented

NOVEMBER, 1996 Nasser dispatches James Padilla to Brazil to take charge of Ford's ailing South American operations

JANUARY, 1998 Nasser names James Donaldson to run Ford Europe

JANUARY, 1999 William Ford is named chairman and Nasser succeeds Trotman as CEO. Nasser begins brand push

NOVEMBER, 1999 Nasser is expected to realign Ford organization to strengthen brand and regional emphasis, reflecting his strategic initiatives



TROTMAN



MONDEO 2000



FORD

new plan simply gives them a greater say in running their operations, and more responsibility if their efforts fail. Scheele says Nasser is giving him a free hand in Europe. He's cutting capacity by 25% and sharing back-office costs with Volvo and Jaguar. Nasser has also told him that the Ford brand must stand on its own in Europe. Scheele wants to burnish the brand by reminding consumers it is German-made, since most Fords are made near Cologne. To reinforce that prestige, Scheele has relocated headquarters and R&D there, as well.

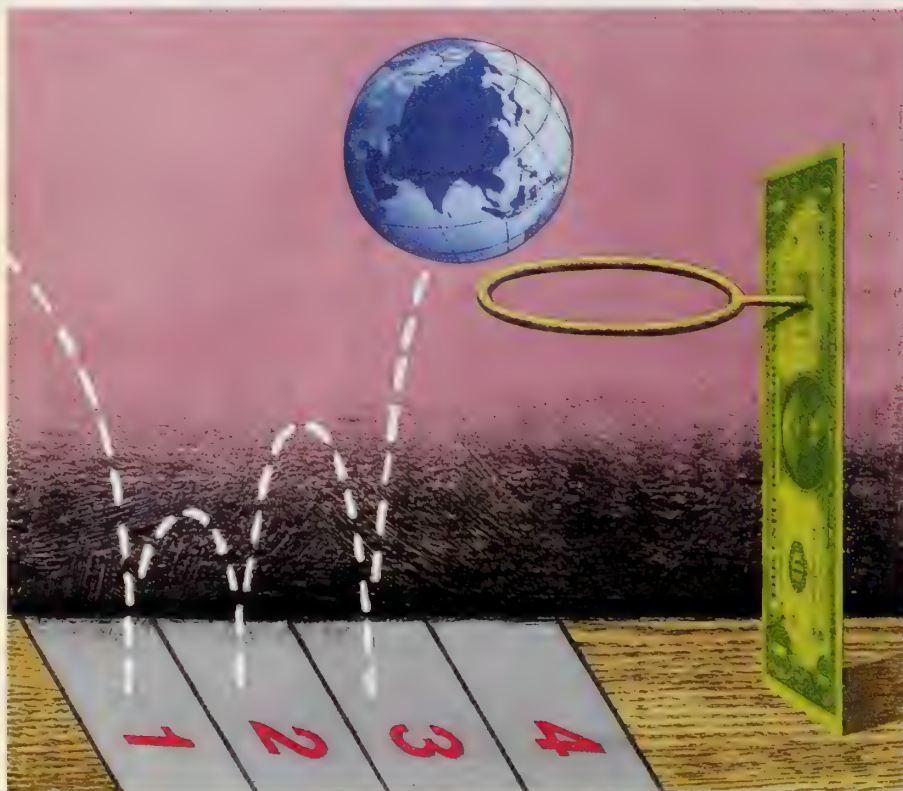
Wherever Ford operates, the central idea is to create bite-size, highly accountable regional brand units that can get close to their target customers' tastes and needs. The goal, especially for Ford's money-losing passenger-car brands, is to bring out cars with brand personalities tailored to suit the younger, hipper buyers who have flocked to European and Japanese cars. Says one source knowledgeable about the plan: "It's going to help them get the brand differentiation they want."

Creating such virtual corporations inside Ford also provides another benefit: training grounds for future leaders. Nasser himself cut his teeth on a series of jobs running regional operations in Argentina, Brazil, Australia, and Europe. "Ford 2000 eliminated the training ground for all of Ford Motor," laments one former Ford exec. Nasser's new "strategic business units" would give a new generation of Ford managers the chance to test their leadership skills with hands-on operating experience.

Striking the right balance between global integration and regional influence is extremely difficult, management gurus say. And auto analysts and industry watchers mostly applaud Nasser's willingness to adapt Ford's game plan on the fly. "He seems to have a reasonably agile philosophy, not getting locked into one strategy forever," says David E. Cole, director of the University of Michigan's Office for the Study of Automotive Transportation. Ford is likely to remain "a company that's continuously restructuring, so that tear-ups don't have to be traumatic," adds Merrill Lynch & Co. analyst John Casasa.

Such continuing change seems likely as Nasser puts his stamp on Ford. So count on more shake-ups and new business plans from the nimble Jac.

By Kathleen Kerwin in Detroit, with Jack Ewing in Frankfurt



THE GLOBAL ECONOMY

HAPPY DAYS ARE HERE AGAIN? NOT QUITE

So far, Asia's recovery isn't helping American exports much

On the steamy streets of Bangkok, where Asia's economic crisis began, something is happening: People are heading into stores again. In July alone, retail sales were up 20% over last year. "The government is right on track," glows Suthichart Chirathivat, chief executive of Central Retail Corp., Thailand's major department-store group. He thinks rejuvenated Thai consumers could push retail sales growth up 15% this year.

That's good news for U.S. exporters. After two years of severe economic

woes, Asian economies are clearly on the upswing. A stronger Japan is expected to help lift the International Monetary Fund's estimates of 1999 global economic growth, due out later this month. Many Asian stock markets are soaring, its key currencies have stabilized, and, more important, its citizens are starting to buy again. While that hasn't yet spurred a rush to snap up U.S. goods, exporters hope the urge to buy American picks up by the end of the year.

The rebound can't come a moment

too soon. The U.S. current account deficit soared 17.5% in the second quarter, to a record \$80.7 billion. That put more pressure on the U.S. dollar, which has struggled as the Japanese yen headed toward a three-year high (page 45). While the dollar's downward drift might fuel inflation at home, it could help U.S. exporters. First all Corp. sees signs that consumer spending could start to accelerate by the end of the year. It predicts 6% earnings growth for consumer staple companies in the Standard & Poor's 500-stock index this quarter, with a 23% surge in the fourth quarter. A good chunk of that increase is expected to come from Asian sales.

BOUNCING BACK. American high-tech companies have already seen Asian sales rebound as businesses and consumers in recovering economies race to join the Internet Age. Oracle Corp. reported a 47% rise in Asian revenues in the second quarter, twice its growth in the rest of the world. And Microsoft Corp. is boasting that its Asian sales are higher than before the crisis. Hewlett-Packard Co. and Dell Computer Corp. are also reporting big jumps. "We're seeing consumer confidence come back," says Ron Goh, vice-president of Dell Computer Asia in Singapore.

Prices of commodities such as palm metals and oil are up, thanks in part to higher Asian demand. "Moderate (growth) would be an accurate way to put it," says Paul T. Murphy, spokesman for Caltex, a Chevron Corp./Texaco Inc. joint venture which operates more than 6,000 service stations across Asia. The tide is also turning for construction and oil-field equipment suppliers.

When Asian economies collapsed in July, 1997, the sales of U.S. exporters' consumer staples went tumbling with them. Everyone from women hawkers to Avon Products Inc. to Coca-Cola distributors saw profits wither amid plunging demand. "These guys seem to be sensitive sooner than everyone else," says Charles L. Hill, First Call director of research in Boston.

Unfortunately, they don't seem to

ASIA WARMS UP

The demand for U.S. industrial products and high-tech wares has begun to heat up, but the demand for consumer and luxury goods remains tepid

Oil/gas and other commodities



Building and construction products



Computers, high-tech products



Heavy-equipment manufacturers



Soda, candy, cheap brand-name products



Watches, whiskey, luxury brands



...rly as quick on the rebound. Ford
or Co., for example, sold just 3,400
s in Thailand in the first seven
ths of this year. "We're still a long
y from our pre-crisis volumes," says
y Kania, president of Ford's South-
Asian operations in Bangkok.
Iven Coke is feeling guardedly up-
t. It has watched sales measured by
e volume rise 6% in South Korea
close to 15% in Indonesia during
first six months of this year. "We
ect improvement to be U-shaped,
V-shaped," says Douglas N. Daft,
sident of Coke's Middle and Far East
up. Gillette Co., meanwhile, says

Asian sales rose 11% in the first quarter
and 14% in the second—with even high-
er gains expected in the second half.

But the Asian hunger for prestige
items and brand names that was so evi-
dent before the crisis has yet to resur-
face. One reason is that the dollar is
still strong against local currencies out-
side Japan. More important, some ana-
lysts also suspect the crisis may have
prompted a permanent shift in con-
sumption patterns. Kuala Lumpur engi-
neer How Poh Seng, for example, now
relaxes after work by drinking a local
beer from the corner store instead of
sipping a foreign brew at a bar. "Every-

body's style of living is to spend less,"
he says. Companies clearly notice that
trend. "What we've seen is a little shift
away from corporate entertaining in ex-
pensive hostess bars to more people
paying out of their own pocket," laments
Stuart Beck, managing director of Asia
for Brown-Forman Corp., a liquor
exporter.

Bottom line: U.S. companies may
have to wait awhile for Far East sales
to reach pre-crisis levels. But at least
they have stopped falling.

By Diane Brady in Greenwich,
Conn., with Jonathan Moore in Taipei
and bureau reports

COMMENTARY

By Brian Bremner

REFORM IN JAPAN: MAYBE THIS TIME

Where should you look to gauge
the true intensity of the Asian
recovery? One of the most im-
pressive signs has been the yen's re-
markable rise. As investors have be-
come more convinced that Asia's
largest economy is serious about re-
structuring, the money has poured in.
Portfolio and direct for-
eign investment this year
has been flowing in at an
unprecedented \$224 billion
annual rate. The yen, in
turn, has rebounded to
heights not seen in three
years, touching 105 to the
dollar on Sept. 14. But be-
hind the scenes, a battle is
raging whose outcome
may well determine
whether Japan will stick
with reform and go on to
lift its neighbors from
their economic malaise.

The Bank of Japan and its
former lords at the Fi-
nance Ministry and ruling
Liberal Democratic Party
are fighting over how far to go with
the yen. BOJ Governor Masaru Haya-
mi has been assailed all summer for
not boosting the money supply, cool-
ing off the yen, and taking the heat
off big exporters—the traditional re-
sponse prescribed by MOF.

NEW RELIGION. On the surface, it's
about arcane monetary strategies
and the real need to restore stability
to the yen. But it's also emblematic
of the struggle between the quick
fixes and brokered bailouts of the
Old Japan and the New Japan's
sound economic policies and emerg-
ing reform. In recent decades, mone-

tary calls were made by the LDP's
hand-picked finance ministers or the
Premier's office.

Such politicized monetary policy
brought Japan the late-1980s bubble
and resultant crash. That era suppos-
edly ended 18 months ago, when the
Diet passed a new BOJ charter. Haya-

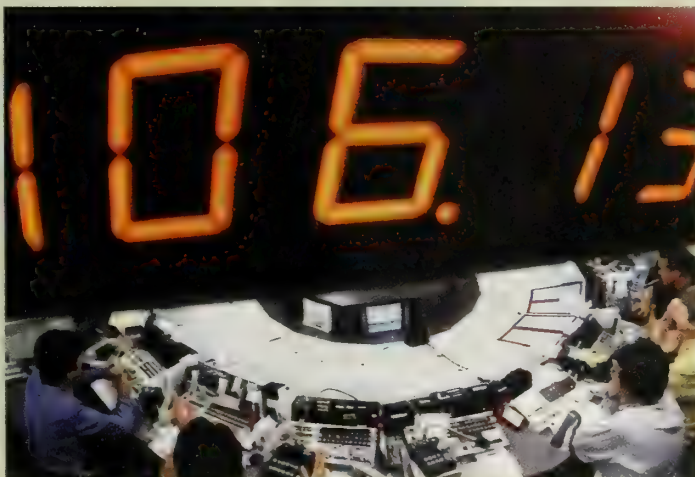
Hayami thinks such a move would
give the LDP carte blanche to spend
the country into fiscal oblivion as the
ruling party bails out friends in con-
struction and banking.

JOINT INTERVENTION. There's no
denying an uncontrolled rally by the
yen to 80 to the dollar, such as oc-
curred in the spring of
1995, would crush ex-
ports, end the stock mar-
ket rally, and crush the
recovery. Hayami doesn't
want a reprise of that,
either. And he has called
for joint intervention
with the U.S. Federal
Reserve to curb the yen.
His aim is for a stable
exchange rate between
110 to 120 to the dollar.
But Hayami isn't inter-
ested in giving a free
ride to Japanese ex-
porters by pushing the
yen down to 147, where
it stood last August.

That could prove toxic to
East Asia. After collapsing 10% last
year, the now cheaper Asian exports
to Japan have jumped 13% in volume
terms this year.

More important, a strong yen
forces Japanese executives to stay
focused on restructuring. None of
this is much fun—nor is Japan's
record 4.9% jobless rate. Yet if
Hayami can prevent monetary poli-
cy from once again being hijacked
by old guard interests, it will be a
big victory for the New Japan.

Bremner is BUSINESS WEEK'S
Tokyo Bureau Chief.



A YEN FOR HEIGHTS? Foreign exchange traders in Tokyo

mi wants the old guard to get the
new religion. Fiscal and monetary
quick fixes are no "panacea for all
the problems the Japanese economy
faces," he says. The BOJ has been
selling yen for dollars, some \$35 bil-
lion worth, in interventions since ear-
ly June. But growth in Japan's broad
money supply has stayed at around
3.5% annually. Some old-liners want
the BOJ to accelerate the rate to dou-
ble digits and use the liquidity to un-
derwrite a tsunami of government
bonds coming on stream to cover a
world-class budget deficit—10% of
gross domestic product.

MANAGEMENT

SUDDENLY, THE SUITS ARE JUMPING SHIP

But what do corporate vets bring to the Net?

There goes another one. On Sept. 24, Mary Alice Taylor, a Federal Express Corp. senior vice-president, became the latest high-ranking exec to abandon the security of a conventional corporation for the unstructured, but potentially lucrative, future in the New Economy. Taylor will become chairman and CEO of Homegrocer.com Inc. in Kirkland, Wash., a year-old online grocery delivery operation that serves Seattle, Portland, and southern California regions. "It's certainly not for the base salary, but rather to be part of changing the way business is done in the future," Taylor says. "I learned a long time ago that when opportunities get offered you have to be willing to stretch and go for them."

Every week brings another such defection to the dot.coms. In June, Amazon.com added a president from Black & Decker, and in early September, it followed up with a CFO from Delta Air Lines and a chief logistics officer from AlliedSignal. Priceline.com landed a president from the senior ranks of AT&T. Nike's vice-president for global sales is trading in his swoosh to become president of an infant online sporting-goods retailer called Fogdog Sports. Says John T. Thompson, vice-chairman of search firm Heidrick & Struggles International Inc.: "I've never seen small emerging companies compete so effectively with top corporations for talent—and win."

Given the paper millionaires—and even billion-

aires—being created overnight with Internet initial public offerings, it's no surprise that executives are often more than willing to take the risk. The intriguing question is why these business thinking, improvisational Internet companies are so eager to bring in people who have spent careers clawing their way up through the Byzantine byways of Corporate America.

Is the dot.com revolution already over? No, it's just getting more intense. The prices of Net stocks are surging wildly and companies are under increasing pressure from skeptical investors to prove that profitability is more than just a theoretical goal. As a result, "there's a demand for more experienced management early in the life cycle of the companies than we've even a year or two ago," says Timothy Haley, a partner at venture-capital firm Institutional Venture Partners in Menlo Park, Calif. **BRAND-BUILDING.** While dot.com boards and investors want most at this stage is brand-building expertise since most of the billions pouring into companies is then flowing out in massive marketing efforts. When it comes to managing multimillion-dollar marketing budgets from scratch, the Net generation's much touted instinct and vision only go so far. "Next to no one who grew up in the Internet economy has any experience managing the kind of money that's available now in marketing," says Joseph Kennedy, 39, who left Saturn Corp. in March to spearhead E-Loan Inc. marketing effort.

Still, there are risks. The young companies tend to inject fortysomethings into their bloodstreams. To reduce the risk of a cultural mismatch, Net execs have come up with some simple tests to separate the truly agile from the mere



From Bricks to Clicks

NAME/DATE	PREVIOUS JOB	NEW JOB
MARY ALICE TAYLOR 49 Sept., 1999	Sr. VP, FedEx	CEO, Homegrocer.com
WARREN C. JENSON 42 Sept., 1999	CFO, Delta Air Lines	CFO, Amazon.com
TIMOTHY J. JOYCE 43 Sept., 1999	VP, Global Sales, Nike	President, Fogdog Sports
DANIEL H. SCHULMAN 41 June, 1999	President, AT&T Consumer Markets	President & COO, priceline.com
GEORGE H. CONRADES 60 April, 1999	CEO, BBN	CEO/Akamai Technologies
JOSEPH P. KENNEDY 39 Mar., 1999	VP Sales, Service & Marketing, Saturn	Sr. VP Marketing, E-Loan

dy. Janina Pawlowski, 39, E-loan's president and COO, says a crucial test is whether people respond to a job offer. When negotiations dragged on for three weeks with one corporate exec, Pawlowski finally rescinded the offer. "This guy was risk-averse," she says. In contrast, Kennedy took a salary cut when he left Saturn and managed to relocate from Tennessee to Silicon Valley in just a matter of weeks. When someone picks up his family and moves rapidly, you think: "O.K., this is a person able to make quick decisions," Pawlowski concludes. Mean-

while, Amazon President Joseph Galli, recruited in June from Black & Decker, says he seeks big-company executives who are "able to operate in an environment of ambiguity." He also wants those who speak their minds and are unafraid to ruffle feathers.

Despite their increasing need for talent, Net companies can afford to be picky. Amazon.com is inundated with 15,000 unsolicited résumés every week, although its latest high-profile hires—Warren C. Jenson from Delta as CFO and Jeffrey A. Wilke from AlliedSignal as chief logistics officer—weren't se-

lected from that pile. Amazon sought them out, needing their familiarity with financial controls and big-company distribution systems to expand beyond its book-selling operation.

All this "corporate think" is as new to online enterprises as the free-wheeling Net atmosphere is for Galli and his Old Economy cohorts. And as Web operations expand, the challenge for the dot.coms will be to make sure that their clicks don't turn to bricks as the suits move in.

By Paul C. Judge in Boston, with Peter Burrows in San Mateo

INTERNET

NET MONOPOLY NO LONGER?

Microsoft is challenging Priceline's patent on Web auctions

Nothing thrills investors quite like a legal monopoly. That's one reason why priceline.com Inc. (page EB 30), with a broad patent on a method of auctioning goods and services on the Internet, rocketed up to a market value of \$1 billion last April after only a year in business. The Stamford (Conn.) company's business model—letting consumers name their own prices for products such as airline tickets and hotel rooms in a variation of the "reverse auction"—promised to revolutionize the way people buy automobiles, mortgages, and dozens of other products.

And priceline.com has certainly gotten off to a winning start. For the quarter ended June 30, revenues leaped 225%, to \$111.6, from the previous quarter. But that was before the company had to meet the first major challenge to the patented techniques at the core of the company's business. On Sept. 8, Microsoft Corp.—apparently undaunted by priceline.com's patented patent protection—announced plans to offer reverse auctions of hotel rooms on Expedia, its Web travel site. Investors, who shrugged off earlier legal challenges, suddenly got scared. Microsoft might wipe out priceline.com's lead start. Priceline.com shares fell to 60% on Sept. 13, 67% off their high, before rebounding to 60 on Sept. 15 after priceline.com announced it had sold a record 50,000 airline seats in one week. Were investors overreacting? Will priceline.com find itself pecked to death by clones, despite its patent? How well does priceline.com patent hold up could

very well determine the answers. While the law allows companies to get patents on methods of doing business, intellectual property experts are increasingly skeptical that priceline.com's will hold up in court. Why? Because reverse auctions existed long before the Internet, and just transferring a selling technique to the Web does not necessarily constitute a novel invention, they argue. "I just don't see it standing up," says Greg Aharonian, editor of the Internet Patent News Service.

This patent is going to be big, really big...



SHATNER: Priceline's mouthpiece

Priceline.com and Microsoft are mum about any potential legal conflict, but investors are clearly worried that the auction patent is vulnerable. "It's only the patent that is holding the barbarians at the gate," says James McQuivey, senior analyst at Forrester Research in Cambridge, Mass. "If not for the patent, what would priceline have to stand on?" The company says that's nonsense. Any challenger will have to provide "clear and convincing" evidence that the U.S. Patent & Trademark Office made a mistake—a tough standard to meet. "Priceline has always had competitors," says founder Jay S. Walker. "What we haven't had is copycats."

TOUGH FIGHT. But if Walker feels so confident about the patent's validity, why has the company not taken on Microsoft? One reason, says New York intellectual property attorney Barry Rein, may be that the company could have a far tougher time proving its patent in court than it had at the PTO. For "a billion dollar market, [competitors] would turn over rocks to find" legal precedents invalidating the patent, he says.

Meanwhile, Walker is fighting a public relations battle to allay investor concerns. After months of boasting about his powerful patent, Walker is now trying to convince stockholders that the patent is less essential to the company's well-being. "What makes priceline successful is not one element," he says.

Still, the idea that Walker had a lock on the reverse-auction concept for e-commerce is what set priceline.com apart. Without it, it's just another online retailer. And when it comes to selling travel on the Net—84% of priceline's business—the company still trails some nonauction sites, such as Travelocity, which offer advice about hotels and sightseeing. If competitors now feel free to poach the reverse-auction concept, priceline's will be just one of the crowd. That's not nearly as appealing to investors as a monopoly.

By Mike France in New York, with Timothy J. Mullaney in New York and Diane Brady in Greenwich

COMMUNICATIONS

WHY 3COM IS HANDING OFF PALM

It will free up brains and cash to fix all the rest

As recently as July, 3Com Corp. CEO Eric A. Benhamou was still smitten with the Palm computer. At 3Com's board meeting that month, he floated a strategic vision that would have woven the popular handheld into every facet of the company's business. But the board didn't buy it. Concerned that Benhamou and his team had taken their eyes off the company's networking business—source of 90% of its \$5.7 billion revenues—they endorsed a management plan to divest the Palm and get 3Com back to its network knitting.

On Sept. 13, Benhamou did just that, announcing a plan to spin off Palm Computing Inc. in a public offering early next year. The timing was odd: The very next day, startup Handspring Inc., a startup founded by three former 3Com employees, was set to launch a Palm-compatible handheld called the Visor, priced at \$149—\$100 below the cheapest Palm. What made the timing doubly odd was that the Handspring trio, creators of the original PalmPilot, left 3Com a year ago after failing to persuade Benhamou to spin off Palm. 3Com claims that the date of the announcement was a coincidence and that the spin-off will promote Palm software, which is used by both companies, as an independent standard for handhelds

STAR PRODUCT. No matter the reason, 3Com's move was another whipsaw change for the beleaguered No.2 maker of networking gear. 3Com has suffered brutal competition, sagging prices, and huge inventory writedowns since its \$7.4 billion merger with modem-maker U.S. Robotics Corp. in 1997, the deal that brought it Palm. While Cisco Systems Inc. has seen revenues soar 89% in the last two years, to \$12.2 billion, 3Com's have climbed less than 3%. Its stock is off 50% from a postmerger high

of 56%. Says Martin Pyykkonen, an analyst with CIBC World Markets: "The U.S. Robotics deal was a real distraction." Its saving grace was Palm, which U.S. Robotics bought for \$44 million in 1996. With nearly 5 million units sold, Palm holds 68% of the handheld market. Now, Benhamou is letting go so he can fix the rest of 3Com. "We need an unequivocal focus on networking in the minds of customers and analysts," he concedes.

No kidding. The non-Palm parts of 3Com grew by less than 1%, or just \$40 million, in its most recent fiscal year, ended May 31, while Palm accounted for 87% of 3Com's \$350 million revenue growth.

So why dump Palm? 3Com figures it can get more value out of the unit by selling it, and the \$5 billion or more raised from an IPO would go a long way toward paying for the U.S. Robotics deal. And, admits Senior Vice-President Janice Roberts, "Palm has diluted our management focus."

It also hid some sins. Without the boost provided by Palm, analysts say, 3Com would see flat or slightly lower revenues this year. "3Com's mature markets are fading faster than emerging areas can pick up," Pyykkonen says.

Now, Benhamou is beefing up 3Com's home and small-business lines and has forged a sweeping partnership with Microsoft Corp. Indeed, Benhamou says getting rid of Palm will let 3Com get



An alliance with Microsoft should keep 3Com at the center of the network action

BENHAMOU: 3COM WILL GAIN "A NEW CLARITY"

closer to Microsoft, whose Windows competes with Palm software. The alliance is key to keeping 3Com at center of the PC business.

TRICKY SEAS. But it may not be enough. Benhamou continues to insist that 3Com will be the leading seller of communications gear, such as modems and network-interface boards for PCs, for individuals. But those markets are in flux—and 3Com may be falling behind. While it dominates sales of conventional modems, 3Com isn't No.1 in either cable or digital subscriber-line modems used in broadband links. And it hasn't been a strong player in home networks.

The Palm spinoff is only one step on the road to 3Com's recovery. If Benhamou can't squeeze more growth out of networking, the company could still be bought or sold off in pieces. The spinoff "will give us a new clarity," Benhamou says. True, but that clarity unmasks a really tough job ahead.

*By Andy Reinhardt
San Mateo, Cal.*

HANDY INDEED

The Palm has provided most of 3Com's recent revenue growth

	1998	1999	CHANGE
	MILLIONS		
NETWORKING PRODUCTS	\$2,350	\$2,610	11%
MODEMS/NETWORK CARDS	2,810	2,590	-8
PALM COMPUTERS	264	570	116

DATA: 3COM CORP.

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DEALS

HAS MOTOROLA FOUND ITS CABLE GUY?

Buying GI would give it broadband clout

Inside the labs of Motorola Inc., engineers have spent the past few years on "Cable Comm," a plan to cook up strategies and technology to use cable-TV networks to handle high-speed digital communications. With cable lines passing by more than 75% of U.S. homes, Motorola grasped that the networks would be able to cash in on the convergence of voice, video, and data services in the home. "The greatest growth opportunities in telecom are in wireless and broadband bandwidth," says Christopher B. Galvin, Motorola's CEO. "We're implementing a strategy to win."

But until Sept. 15, Motorola didn't have such a good shot at the cable-based broadband world. A leader in wireless and chip markets, it had only one dominant line of business in cable gear—as the top supplier of modems to cable-TV operators.

On the 15th, however, Galvin sealed an \$11 billion deal to buy General Instrument Corp., the No. 1 maker of cable set-top boxes.

COPPER BONUS. The acquisition catapults Motorola, based in Schaumburg, Ill., deep into the sizzling broadband realm. By hooking up with General Instrument, Motorola moves closer to cable companies preparing to pump as much as \$70 billion over the next

three years to turning their networks into high-speed digital pipelines.

The deal even comes with a sweetener. General Instrument also brings in knowhow for DSL (digital subscriber lines), a technology to provide broadband service over copper telephone wire. GI holds a majority stake in Next Level Communications Inc., a high-profile maker of DSL gear. So Motorola is now positioned on both sides of the broadband race. "That's the hidden jewel," Galvin says.

Investors, however, see only a diamond in the rough so far. Why? The deal involves swapping nearly six-tenths of every Motorola share for one share of GI. That values GI, with a market cap of \$8.4 billion before the deal, at roughly

MOTOROLA'S BROADBAND SPEED-UP

Motorola's \$11 billion acquisition of General Instrument connects it to key sources of high-speed multimedia communications technology.

SET-TOP BOXES GI is the world's leading maker of cable converter boxes that funnel video, games, and Internet applications to TVs.

CABLE MODEMS Motorola already has about a 60% share. GI is the top maker of infrastructure gear that feeds data over cable systems.

DSL Motorola will get a 67% stake in Next Level Communications, a promising supplier of Digital Subscriber Line technology, which sends high-speed data over copper phone wires.



GALVIN

BREEN: GI has phone technology, too \$11 billion. Those would dilute Motorola earnings by some per share in 2000.

cording to Alex Cena, a Salomon & Barney analyst. Motorola's stock tumbled 8.5%, to just over 90, on the word of the merger leaked. "This is one of the worst ideas I've ever seen," howled one long-time stockholder.

CULTURAL MISMATCH? Unfazed, Galvin points to earnings growth expected in the second year of the merger and the promise of a global broadband boom. Even so, Motorola, which only recently rebounded from a string of poor quarterly reports, has little room to disappoint Wall Street. The bankrupted Iridium LLC, the satellite project backed, hasn't helped investors forget the recent woes. Plus, GI has a volatile earnings history, reporting losses of \$10 million in 1996 and \$16 million in 1997 before logging \$55 million in earnings last year.

Furthermore, Motorola has never acquired a company the size of GI, which had revenue of \$2 billion last year. The new teammates dismiss notions that the merger will create a cultural mismatch. After all, Motorola has worked as a supplier of silicon chips for GI. The two companies "mirror each other in the way we think," says Galvin. Edward D. Breen. After the merger, General Instrument will remain a separate unit under its current executive.

If successful, the latest deal could help Motorola finally achieve its elusive goal of forging ties with cable operators such as AT&T, which bought Time Warner Communications International Inc. last year and proposed buying cable plant from MediaOne Group this year. What's more, John C. Malone, the former chairman of TCI, now heads AT&T's Liberty Media Group, which has a big stake in

"That's really where you want to be," says Mark McKechnie, a wireless equipment analyst at Banc of America Securities. Motorola will also be able to combine its engineering knowhow with GI's cable-router expertise to push broadband applications like 3-D video and interactive gaming into homes.

"This will be Galvin's legacy," says James M. Phillips, CEO of video-content provider iFilm. "That he fast-forwarded the company into broadband." For a CEO trying to make his mark, that looks like it could add up to a winning play.

By Roger O. Crockett in Chicago

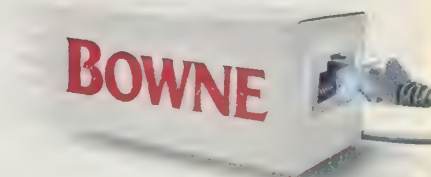
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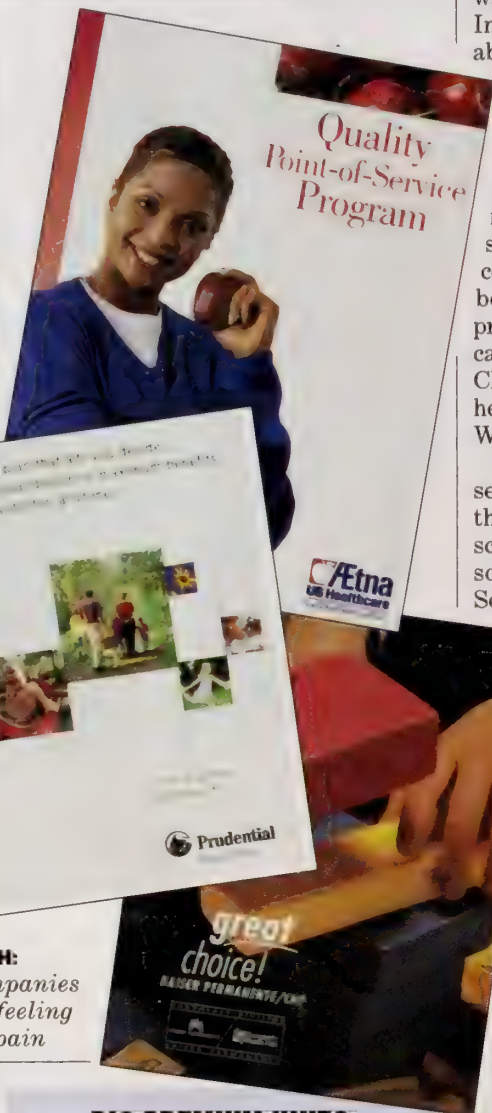
For the past three years, the cries of "wolf" from economists could be heard every September. If health insurers could wrestle big hikes in annual premiums for managed-care plans from business, inflation would surely follow, they howled. But every time, corporate buyers stood firm and pared double-digit demands down to sheepish increases that barely outpace inflation.

This year, the wolf is winning. As they nail down contracts before the fall benefits-enrollment season, health-maintenance organizations are sealing deals for premium increases of as much as 15%, or six times the overall rate of inflation. "Employers are experiencing sticker shock," says Blaine J. Bos, a principal at William M. Mercer Inc., which negotiates with 400 HMOs for clients nationwide.

CONSOLIDATING WOES. Blame the hikes on rising medical costs, skyrocketing prescription-drug expenses, hefty HMO losses—and most assuredly, on consolidation, which has cut down the number of HMOs bidding for corporate business and created several behemoths that control the market. There's more to come: Mercer, for example, already has reports of rate hikes next year of as much as 9% to 12% for large companies, and 15% to 20% for small companies.

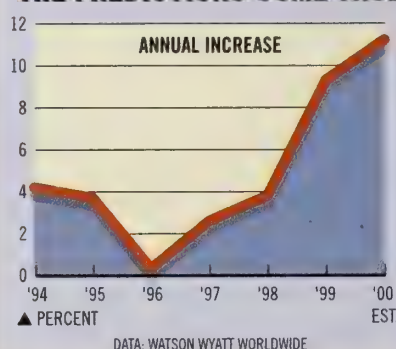
Small companies already feel the pain: Wanda Rohm, owner of Presto Printing Inc. in San Antonio, which has 17 employees, says if she stays with her current insurer, her group rate will jump 50%. That's pretty scary, says Rohm, who fears she may have to boost employee contributions, raise printing prices, or limit coverage if she can't find a better deal.

Until recently, HMOs had kept premiums low to gain market share and tried to offset the hit to revenues by squeezing their medical providers. But doctors and hospitals have been demanding increases in their reimbursements and defecting from HMOs if they don't get them. Consumers, employers, and government officials also want expanded coverage and increased provider choices.



OUCH:
Companies
are feeling
the pain

BIG PREMIUM HIKES: THE PREDICTIONS COME TRUE



After racking up hefty losses in 1997 and 1998—a combined total of \$1.2 billion, according to Palm Beach Gardens (Fla.)-based insurance-rating firm V. Ratings Inc.—insurers are reversing course. "The industry has been underestimating how fast health-care costs would rise," says Norman C. Payton, chairman and chief executive of Hartford (Conn.)-based Oxford Health Plans Inc., which is raising 2000 plan rates about 9%, the same as 1999. "Now everyone's rates have to rise."

The magnitude of expected increases for next year, on top of hikes this year well above inflation, suggests that managed care has done much of what it can do to trim costs, some experts say. That means consumers of health care will no longer be insulated from the rising costs of providing care. "This is a huge wake-up call for the business community," says Christopher J. Mathews, who heads health-benefits practice for consulting firm Watson Wyatt Worldwide.

Indeed, many employers are already seeking a more active role overseeing their HMOs. In the meantime, they're scrambling to find ways to either absorb or avoid additional rate hikes. Some are boosting employee contributions and tinkering with benefit packages, such as raising prescription-drug copayments. Others are fighting back by switching insurers, forming coalitions that deal directly with health-care providers, and auditing HMOs. For example, Pacific Business Group on Health, a Los Angeles corporate purchasing alliance which recently agreed to an average 11% increase in HMO premiums for 2000, says it will conduct HMO audits to track the flow of money from health plans to physicians and hospitals.

Until now, "companies have taken those increases and gone merrily on their way," says Rocky Mangiaracina, director of human resources for Iser (N.J.)-based specialty-chemical company Engelhard Corp., where HMO rates will rise 10% to 11% in 2000 on top of 7% to 8% increases in 1999.

But as the number of HMOs declines, it will be hard for companies to be as forceful in their negotiations. And, facing the tightest labor market in 25 years, they will also be tough to push costs onto employees. That leaves HMOs in the vulnerable position, at least for a while longer, of not only demanding—but getting—hefty price increases.

By Stephanie Anderson Forest
Dallas, with bureau reports

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MANAGEMENT

MAYTAG THROUGH THE WRINGER

Did CEO Ward take his eye off low-end products?

Lloyd D. Ward had a short honeymoon. Barely into his second month as CEO at Maytag Corp. (BW, Aug. 9), he's facing his first crisis. On Sept. 10, the appliance maker warned investors that third-quarter sales and earnings would be flat compared with last year—not the 18% jump from 84¢ per share to 99¢ analysts had predicted. The stock dropped 26% on the news and is now down almost 50% from its high of \$75 last July.

An earnings shortfall is one thing, but some analysts and investors complain Maytag should have disclosed the problem quicker. "With an earnings miss of this size, it's hard to imagine they didn't have prior knowledge of it," says one investor who dumped more than 1 million Maytag shares. And given the heavy sell-off in the stock leading up to the announcement—and a huge jump in put option volume—it appears some investors knew of the shortfall before others.

Ward, a former PepsiCo exec, strong-

ly denies that Maytag selectively disclosed information. "Once we had clarity on the situation, we went public with it," says Ward, who is now busy smoothing relations with the investment community that had bought into his vision of remaking the old white-goods maker with high-margin, high-tech washers, stoves, and other appliances.

Whirlpool and General Electric, however, have been stealing share in the low end of the market. And sales of Maytag's pricier wares aren't enough to make up for mass-market losses. "We've got to find ways to support and grow our value brands," says Ward, who has announced a corporate restructuring to speed the effort. But with Whirlpool and GE preparing to introduce more



HOME ON THE RANGE: The honeymoon's over for Ward

competitive products at the high end, Ward's job won't get any easier. "There's usually more than one downward adjustment with these things," warns analyst Justin Maurer of McDonald & Investments. If so, this may not be Ward's last gig on the spin cycle.

By Andrew Osterland in Chicago

FINANCE

THAT'S ONE SLICK SHOWROOM

CarsDirect is about to get megabucks in private money

Even for folks who claim no longer to be surprised by the huge sums of money pouring into fledgling Net outfits, this will be an eye-opener. Within a few weeks, CarsDirect.com, a car-retailing site, plans to announce a private financing that CEO Scott Painter says will reach "several hundred million" dollars.

CarsDirect won't reveal the investors since the deal hasn't been signed. But even by the ever-rising standards of venture capital investment, that's a lot. Before this, the most lavish financing was the

\$128 million put into Via Networks Inc.

What could inspire such largesse? Unlike rivals Autobytel.com and Autowe.com, which give price data and help buyers find a dealer, CarsDirect actually can arrange a sale online. It sets the price with the tire-kicker, then buys it from a dealer. CarsDirect lures customers by setting prices in the bottom 10% of the market for a particular model, but must buy cars even more cheaply from dealers to make a profit. Launched in December, the company's early backers include idealab!, the Web incubator run by William Gross, Michael S. Dell's venture-capital fund, and Primedia Ventures. Says Gross of the huge investment: "We

would do it just to make sure we build the largest car dealer in the world."

Painter says CarsDirect will sell 1,000 cars this month and the value of vehicles sold through the site could reach \$100 million this year. That's quite a leap, considering it only hit \$100 million last month. Painter says September's puts CarsDirect ahead of the top single-franchise U.S. dealer. But, says Jan McQuivey, senior analyst for Forrester Research Inc., CarsDirect's model is untested. "All they have is motivated salespeople in a call center" who try to get dealers to sell cars for less than CarsDirect's customer is paying. Meanwhile, Autobytel.com Inc. is testing direct sales too.

CarsDirect plans to plow millions into ads and brand building. Those efforts have been shortchanged so far. With its new funding that won't be a problem.

By Timothy J. Mullaney, New York, and Larry Aronson, Los Angeles





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GLITCHES: Acela's designers blame each other

TRANSPORTATION

FAST TRAIN TO NOWHERE?

Delays in the high-speed Acela may threaten Amtrak's future

So much for on-time arrivals. Acela, Amtrak's much-vaunted high-speed train, will now leave the station next spring, at least six months behind schedule, the federally funded rail line announced on Sept. 1. The delay—caused by excessive wear to Acela wheels in tests—could have far-reaching repercussions. Amtrak Chief Executive George D. Warrington is in a race against time to make Amtrak, also known as the National Railroad Passenger Corp., self-sufficient before Congress ends operating subsidies in 2002.

Acela plays a key role in Warrington's plans. The sleek 150-mile-per-hour train, with modem jacks at every seat and microbrews on tap, is expected to add \$180 million in annual profits and boost market share against airline shuttles in the busy Northeast Corridor.

DISCOURAGED. The delay makes Warrington's task that much harder and gives the railroad's enemies in Congress fresh ammunition. Before the Acela announcement, Amtrak already projected a \$930 million operating loss for 1999 and \$908 million for 2000. "Their goal of self-sufficiency in 2002 is down the drain," says Paul Weyrich, a Republican appointee to the 11-member Amtrak Reform Council and a former Amtrak board member.

Even Amtrak fans are discouraged. "I have serious doubts about whether they can meet their operational targets," sighs Representative Bud Shuster (R-Pa.), chairman of the House Transportation & Infrastructure Committee. "Is liquidation a possibility? Yes."

Acela's delay could also turn off the public. The \$20 million publicity campaign promoting it had already begun, including Acela ads plastered in Boston and Washington, D.C. Now, passengers hoping to lop some time off their trips this fall—as much as one hour and 45 minutes on the Boston to New York leg—may opt for the airport instead.

Amtrak is not the only company with its fortunes riding on Acela. Bombardier Inc. of Quebec and Britain's GEC Alstom are building the high-speed

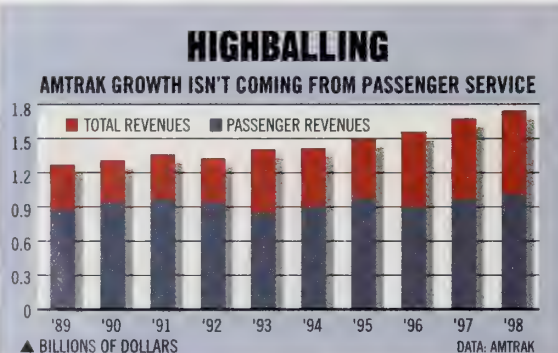
Alstom had no comment.

Warrington, a former president and executive director of the Delaware River Port Authority says he's a business man, not a train buff. He brushes off critics. "I'm not going to be distracted by antagonists who have predicted failure and doom for the past 25 years," he huffs. He downplays the revenue problem, explaining that Acela's glitches will delay all 20 trains on order.

But Warrington concedes that the train must be run more like a 21st century business, not a 19th century railroad. To increase revenue, he is teaming up with United Parcel Service, the U.S. Postal Service, and other railroad haul mail and overnight freight on passenger trains. He is also eager to develop Amtrak-owned land adjacent to stations. Ridership is up 3% so far this year and should surpass last year's 10 million passengers. Passenger revenues also are on the rise, growing 4% in 1998 to \$1.7 billion. Still, for a decade, Amtrak's total passenger revenues have barely budged—the business has grown by adding other revenue (chart).

But even if Amtrak breaks even, the political battle won't be over, Warrington says. A viable passenger rail system will need about \$1 billion a year in federal subsidies to build and maintain its infrastructure—almost twice what it got this year, he contends. "I'm getting tired of hearing comparisons about what it's like to take a train in Europe. You get what you pay for," Warrington says. "If we invest capital, we will be a market force in this country." Perhaps. But first this train has to leave the station, and fast.

By Lorraine Woellert
Washington



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EDITED BY MARK FRANKEL

BRACING FOR PINK SLIPS AT AT&T

THE CUTS ARE COMING—again. Employees at AT&T are bracing for more layoffs. After slashing 20,000 jobs in 1998 in a bid to eliminate \$1.6 billion in annual costs, Chairman Michael Armstrong is planning another round. The goal is to reduce the company's overhead by a further \$2 billion by the end of 2000. Workers are expected to start hearing about which jobs will be eliminated at the beginning of October. The cost-cutting comes as fierce price competition in AT&T's long-distance business bites into revenues—and as the phone giant lays out \$110 billion to acquire cable networks and upgrade them so that

they can carry local phone service and high-speed Internet access.

AN INTERNET BOOST FOR THE BELLS

THE FEDERAL COMMUNICATIONS Commission has given the Baby Bells more leeway to get into high-speed Internet access. On Sept. 15, the agency redefined the parts of a phone network a Bell must lease to new local competitors. The FCC did not include parts of the network necessary to offer data services. That will give the Bells more incentive to invest in new services. Lawmakers have been pressuring the FCC to give the Bells more breaks to help them move into Internet services more quickly.

CLOSING BELL

WEAK SPARK

Auto-parts maker Federal-Mogul Corp. fell 23%, to 30%, on Sept. 14 after disclosing a third-quarter earnings shortfall. The Southfield (Mich.) company cited a weak demand for replacement parts, among other woes. Merrill Lynch's John Casesa says Federal-Mogul "tripped up in executing a sound, but apparently too ambitious strategy." Several analysts downgraded the stock, which closed on Sept. 15 at 27½.



VENCOR IS ON THE CRITICAL LIST

IS IT CODE BLUE FOR VENCOR? On Sept. 14, the nation's largest operator of long-term health-care facilities filed for Chapter 11 bankruptcy. The Louisville outfit, which lost \$651 million in 1998, previously had its stock delisted by the New York Stock Exchange. It also faces lawsuits for allegedly padding Medicare bills and is under investigation by the Justice Dept. "It's in a very difficult situation, but it will probably will survive as an operating company," says Stephen O'Neil, an analyst at J.J.B. Hilliard, W.L. Lyon, a Louisville investment company. Vencor officials could not be reached for comment.

GE BRANCHES OUT IN BROADCASTING

WHAT, EXACTLY, IS A BROADCASTER in the Net Age? General Electric's NBC made two deals in mid-September that push the definition. NBC will

HEADLINER: WILLIAM RADUCHEL

A BRIGHT RAY OF SUN AT AOL

Filling the shoes of Netscape founder Marc Andreessen would give most people pause. On Sept. 10, the student-turned-billionaire stepped down as America Online's tech head to work on new business for Netscape's parent. But his replacement, longtime Sun Microsystems exec William Raduchel, may be just what AOL needs.

Raduchel's deal making is one reason Sun is so stellar. He drove the deal that gave Sun control of Netscape's software after the AOL merger last year. Now, the former Harvard professor will help AOL de-

liver on its plan to deliver content via all sorts of Web devices. "I have a deep understanding of technology that

comes with 40 years of experience," says Raduchel, 53.

But leaving Sun wasn't so simple, partly because of his friendship with CEO Scott McNealy. He was McNealy's thesis adviser at Harvard. Laughs McNealy, "What am I supposed to say: 'Great'? It's a real hole, but I'm thrilled to death for him." If Raduchel has his way, lots of Netizens may be thrilled, too.

By Peter Burro
in San Mateo, Cal.



get into everything from stocks to socks on the Web. On Sept. 14, CNBC, the financial-news cable channel, bought 12.4% of Archipelago Holdings, an electronic stock-trading system. While the move raises questions about editorial objectivity, it also gives CNBC a big push toward offering viewers the ability to buy the stocks it mentions on the air, through WebTV or a similar device. The next day, NBC said that it was forming a new home-shopping channel and related Web site, SnapTV. You may never have to leave your house again.

MICROSOFT: MORE HOOKS IN THE NET

IN A BID TO TIE ITSELF further to the Web, Microsoft on Sept. 13 launched a wide-reaching strategy aimed at revamping the methods that software makers use to create applications. In addition

to releasing a number of software programs over the next 18 months, Microsoft will introduce several technologies designed to persuade software developers to create e-commerce and Internet services that run its operating systems.

But the software giant not writing off the desktop personal computer: On Sept. 15, it revealed it would buy Visio, a maker of design software, for \$1.3 billion.

ET CETERA...

- Former Avon exec Christina Gold will become CEO of Excel Communications.
- Dime Bancorp and Hudson United Bancorp will merge in a \$3.6 billion deal.
- Fannie Mae exec Lawrence Small will take over as secretary of the Smithsonian.
- Oracle said net income for the quarter ended Aug. rose 21%, to \$237 million.

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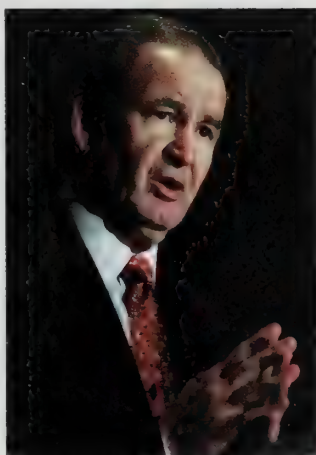
TED BY LEE WALCZAK

MAKE WAY FOR NOT-SO-COMPASSIONATE CONSERVATIVE?

It's tempting to view the Reform Party these days as a parody of a third party. It was founded to advance zillionaire Ross Perot's Texas-sized ambitions. But even as chapters erupted, Perot's share of the Presidential vote dipped from 8% in 1992 to 8% in 1996. Lately, Reformers' exertions have gone on slapstick. Forces loyal to Minnesota Governor Jesse Ventura have been wrestling pro-Perot partisans for influence. Names floated as Reform candidates include Warren Beatson, one of America's most prickly figures—ex-Senator and former Lowell Weicker of Connecticut and New York developer Donald Trump.

But the laughing stopped on Sept. 12, when mentor Patrick J. Buchanan told viewers he was likely to bolt the Republican Party to mount a Presidential bid under the Reform banner. An articulate leader of the GOP's anti-aborate, anti-Washington populists, Buchanan demonstrated an ability to meld the votes of abortion foes, America Firsters, and angry blue-collar workers into a populist force that is deadly serious in Austin. Why? Because the Reform base gives Pitchfork Pat both the clout and the potential troops to snare Presidential votes—votes that will come out of the pockets of Texas Governor George W. Bush, the front-runner.

With \$12.5 million in federal funds awaiting, a man secured by Perot's performances at the box, Buchanan would have enough cash for a low-budget campaign. Even if he can't mount a winning White House bid, he could well influence the outcome of Election 2000. A Sept. 7-9 survey by Republican pollster Frank I. Luntz shows that 7% of Americans would consider voting for Buchanan as Reform's standard-bearer. Two-thirds of his backing would come directly from Bush, the poll shows. An Aug. 15-17 survey by Democratic pollster Rob Schroth puts Buchanan at 16% when asked against Vice-President Al Gore and Bush. The Buchanan



BUCHANAN: *Reform-bound?*

factor causes Bush's double-digit lead over Gore to dip to 4%. In particular, Buchanan costs Bush the votes of white Southern men and blue-collar Midwesterners. That giant sucking sound "makes it a race," says Democratic consultant Dane Strother. "It's going to take something like that for Gore to win."

Buchanan seems willing to play spoiler. "If he goes in this direction, he doesn't care if the Republican Party finishes second or third," says Buchanan campaign aide Bob Adams. Of course, Buchanan still has to win the nod. Reformers will hold their

convention next Aug. 10-13 in Long Beach, Calif., and the TV tough guy may have to duke it out with a more moderate contender, such as Ventura or Weicker. But his chances are good. Buchanan's fierce protectionism and nationalistic foreign policy are in synch with many Reformists' beliefs. "If Buchanan beats Bush in the first debate, he becomes a major challenger," says economist Pat Choate, the Reform Party's '96 Vice-Presidential candidate.

"WACKO YEAR." What happens if he doesn't get the nod? The smirk will fall from Gore's face. If an independent like Weicker emerges, "he makes the Republican candidate virtually certain to win," says independent pollster Gordon S. Black. Why? Because Weicker, a libertarian maverick, draws from suburban independents, who are notably cool to Gore.

At very least, the return of the Reformers will add a volatile new element to what up to now seemed like a staid Presidential race. "It's going to be a wacko year," chuckles L. Brent Bozell III, a former Buchanan fund-raiser who is backing publisher Steve Forbes. But if Buchanan barges onto center stage, you'll have to forgive George W. for not joining in the yuks. He believes the Reform Party insurgency cost his father the '92 election. And now his worst nightmare is history repeating itself.

By Richard S. Dunham

CAPITAL WRAPUP

THE FCC: STICKING TO ITS GUNS

Despite lobbying by Viacom's Sumner Redstone and CBS's Mel Karmazin, neither Congress nor the FCC is likely to give either CEO a break on their proposed merger. The combined reach of Viacom and CBS would exceed the 35% statutory limit of national broadcast market share that one company can own. Opposition by powerful local TV affiliates to lifting the cap will likely keep the commission or Congress from changing the rule. After all, lawmakers depend on local TV stations for

coverage during election season.

The FCC is likely to hang tough in another megamerger. On Oct. 8, the agency is expected to approve a new rule limiting a company's ownership of cable properties to 30% of the national market. AT&T CEO C. Michael Armstrong is storming Capitol Hill to argue against such a rule because it threatens his proposed acquisition of cable company MediaOne Corp. The combined reach of AT&T, which owns cable giant Tele-Communications Inc., and MediaOne likely exceeds the 30% limit.

By Catherine Yang

HISPANIC VOTE UP FOR GRABS?

►A Sept. 2-9 Penn, Schoen & Berland Associates poll of Latino voters in five major cities found two-thirds intended to vote Democratic in 2000. The poll, for Spanish-language TV network Univision, showed firm support for more school spending and for shoring up Social Security and Medicare ahead of tax cuts. But it also shows the GOP could make inroads. Some 40% want government to stay out of the market, and 80% would replace welfare with private-sector jobs.

EUROPE

EUROPE'S BIG CHANCE

Will reforms spawn a New Economy?

In the 1980s, France's Renault was notorious for its featherbedded workforce. But what a difference a decade makes. The auto maker now has 20,000 fewer workers than it had in 1989—and churns out 220,000 more cars a year. The company's engineers have designed the latest version of the best-selling Clio minicar with 28% fewer parts. No wonder profits at Renault are jumping sharply.

Less than six months after a dangerous flirtation with deflation, the 11 European Union countries that share a common currency are suddenly bursting with economic energy, thanks in part to big-company makeovers. Even growth in Germany, the region's largest but most downbeat economy, has ignited and is now expected to top 3% next year, vs. a desultory 1.6% this year. More French left the dole in July than in any month since mid-1993.

Indeed, the euro zone looks set to outperform the U.S. slightly next year for the first time since 1992, thanks to

rock-bottom interest rates and the weak euro, according to many private forecasters. But this time, European policymakers are hoping for far more than a cyclical upswing. Their thinking: If politicians push through some key reforms, the euro zone might spawn a U.S.-style New Economy in which high growth goes hand in glove with low inflation, fast productivity growth, and more jobs. "This is Europe's big opportunity," says Daniel Gros, deputy director of the Center for European Policy Studies in Brussels.

CHEAPER CAPITAL. It has long been a European dream to rev up the Continent's capacity to grow without inflation from about 2% to 2.5% a year now toward the 3% needed to take a big bite out of jobless lines. Many of the conditions are in place to give Europe a shot at doing that. Years of tight monetary and fiscal policy ahead of

January's launch of the euro have purged core European economies of lingering inflation. A huge new euro capital market is enabling European companies to get funds as cheaply and innovatively as their U.S. rivals.

A key contributor to more robust corporate health is a pickup in labor productivity, which has grown faster in the 1990s than it did in the 1980s (box, page 64). Companies have spent years wringing productivity gains out of their workforces, and they don't intend to let up. On Sept. 8, French tiremaker Michelin an-

nounced plans to raise productivity 20% over three years by slashing European payrolls by 7,500 people, or 10%.

So why isn't Europe the envy of the world when it comes to creating a vibrant, full-employment economy? After all, the U.S. has translated its productivity surge into more jobs and greater growth. The short answer is that Europe lags seriously behind the U.S. in fast-expanding high-tech industries. German investment in information technology was just 2% of gross domestic product last year, vs. 4.2% in the U.S., according to International Data Corporation in Framingham, Mass. So Europe has

EUROPE IS REVVING UP...

GROWTH

Is picking up in the big economies such as Germany

PRODUCTIVITY

Growth has accelerated since the 1990s

INTEREST RATES

Are low, as are inflation and budget deficits

...BUT THERE ARE STILL BRAKES

GOVERNMENTS

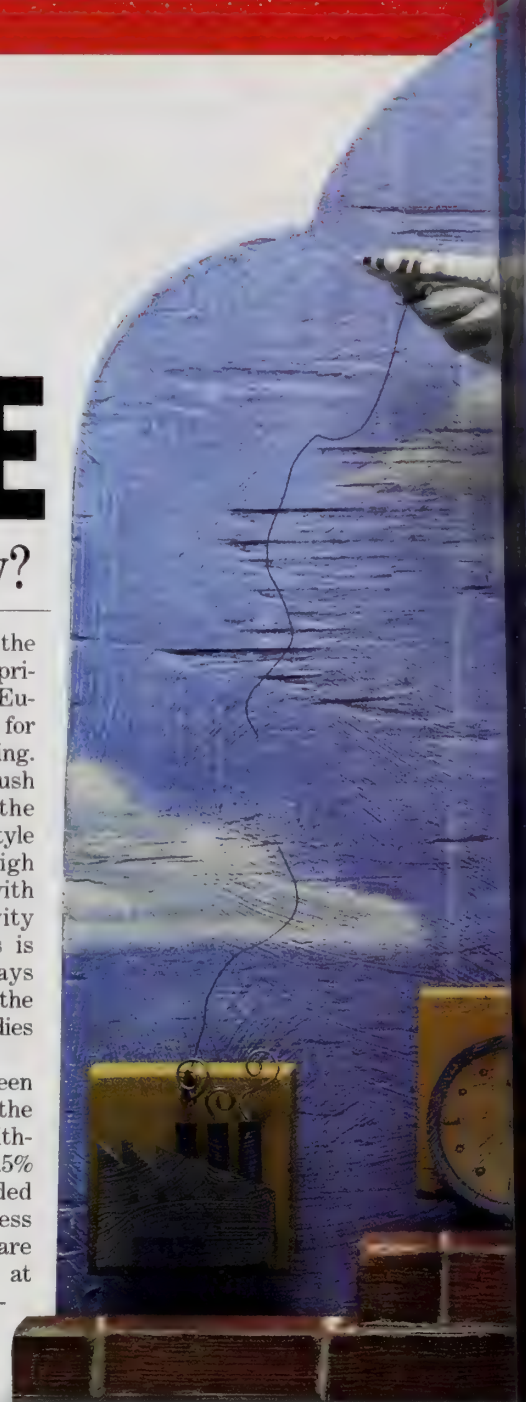
Are still too slow to free up rigid labor markets

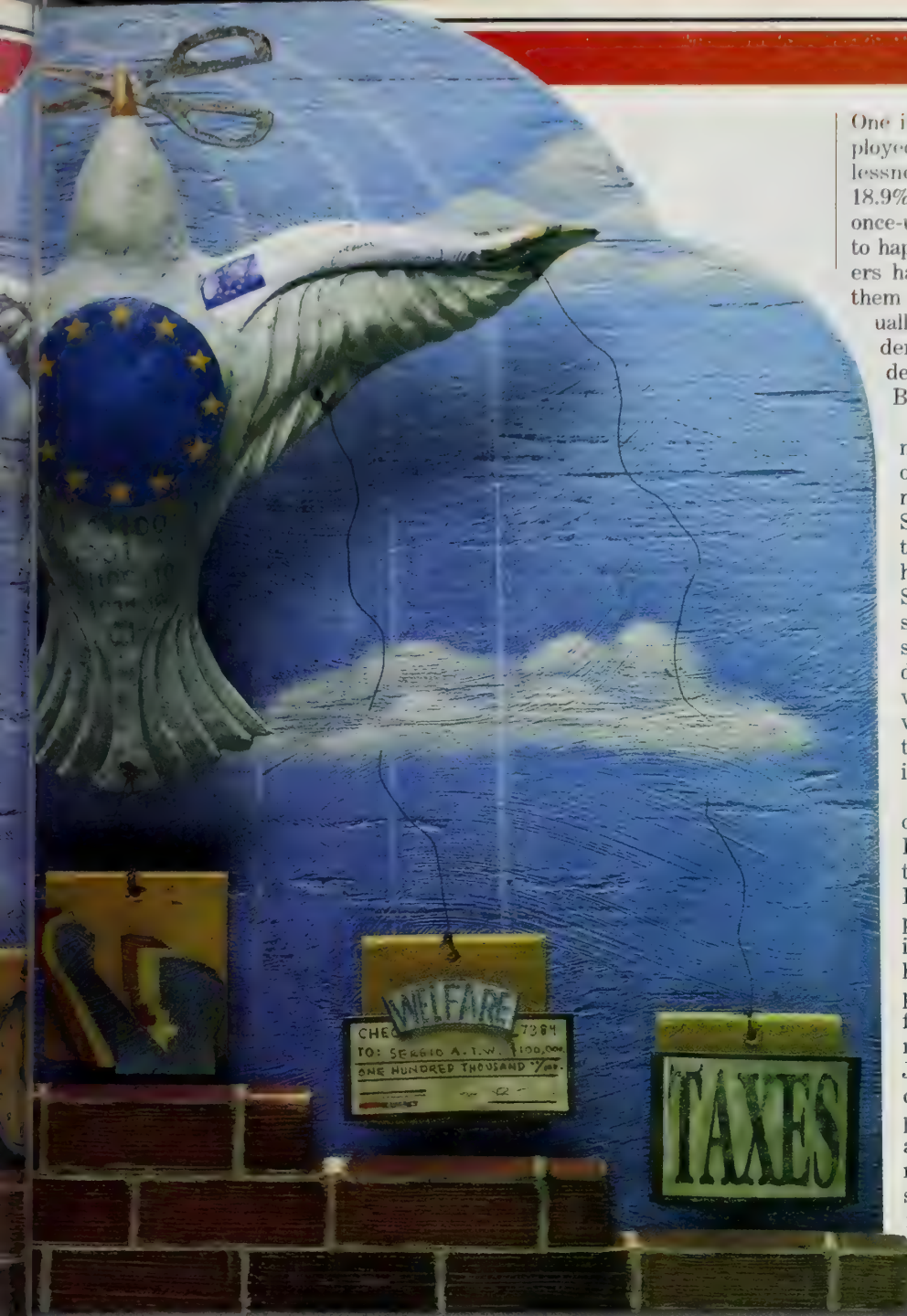
INVESTMENT

In fast-growing high tech and the Internet remains too low

LABOR UNIONS

Resist new technology and work practices





One in 10 Spanish workers is now employed under such a contract, and joblessness has tumbled to 15.6% from 18.9% in the past 12 months. Other once-unthinkable changes are starting to happen, too. Some German shop owners have been flouting laws that force them to close on Sundays. "We're gradually seeing more labor flexibility and deregulation," says Steven Englander, an economist at Salomon Smith Barney in London.

Fierce political battles in Germany could largely determine the outcome for the rest of the Continent. Despite his drubbing in the Sept. 5 and Sept. 12 regional elections, Chancellor Gerhard Schröder has pledged that his coalition of Socialists and Greens will fight to slash corporate taxes, cut state spending, and push through overdue pension reforms. That's in line with the pact he recently signed with Britain's Labor Prime Minister Tony Blair calling for far-reaching free-market reforms.

Not all center-left leaders are on board. French Prime Minister Lionel Jospin, for example, declined to join the pact. But even in France, there are signs that the politicians are bending. Take the introduction of a compulsory 35-hour workweek. It looks like a prime example of an old-school effort to divvy up the economic pie rather than make it grow. Yet Jospin's move has forced major concessions from French labor. Hypermarket chain Carrefour, for example, has been able to introduce more shift working. So, provided some reform is implemented, Europe might be able to escape its self-destructive cycle. Indeed, as business confidence perks up, companies are again investing at home after years of fleeing the Old Continent.

Deutsche Bank forecasts expenditures on new plant and equipment in the euro zone to expand by a healthy 5.2% this year and by 5.1% next year.

Facing sharp global competition, companies are still restructuring like crazy. Merger deals worth a cool \$930 billion will be finalized this year, well up on 1998's record \$777 billion, according to London-based Thomson Financial Securities Data. And the euro zone's Internet economy is finally starting to take off. French bank BNP-Paribas, for example, just announced it will launch a pan-European brokerage.

The danger is that Europe's present

ed high-tech winners in the same proportion as the U.S.

But there are notable exceptions, such as Nokia, the Finnish telecom giant, that show what Europe can do. With first-half sales up a sizzling 49%, to \$8 billion, Nokia has orders coming in so fast that Chairman and Chief Executive Jorma Ollila has had to hire 10,000 extra staff just to keep pace. Even Mannesmann, once a traditional German steel and engineering company, has poured more than \$20 billion in the past three years into telecom as it diversifies from old-line business.

So Europe is assembling the build-

ing blocks needed for a big spurt in growth potential. But it still has to cope with the excesses of 50 years of welfare-state politics that make it prohibitively expensive to hire and fire workers, hobble startups, and pile up taxes and hidden costs on employers. The U.S., with far fewer such impediments, created 13 million new jobs between 1992 and 1997 while the euro zone lost 800,000.

MERGER FRENZY. The chances of implementing radical reforms in Europe might look iffy. Yet there are signs that its politicians are ready to take the heat and do so. Last year, Spain loosened restrictions on part-time and temp work.

export-led recovery will sputter and turn out to be yet another brief cyclical upswing. But that would mean ignoring years of advice and warnings. "We've done our part to stimulate the economy," said European Central Bank President Wim Duisenberg in April, when the ECB cut euro interest rates to a record low of 2.5%. "Now it's up to governments to do their [job] by tackling the economy's structural problems."

IMAGINATIVE DEALS. However slow governments are to reform, the pace of change in business is frenetic. Chairman Gérard Mestrallet has transformed France's Suez Lyonnaise des Eaux, which was once an unwieldy financial conglomerate, into a global utilities player. The French company has just bought U.S. water-treatment company Nalco Chemical for \$4.1 billion. Frankfurt-headquartered Hoechst and France's Rhône-Poulenc merged their pharma-



ceutical businesses this summer to form the \$20 billion Aventis. This imaginative cross-border deal wouldn't have happened a few years back.

The euro's arrival is one reason why European governments are being forced

TECH FUTURE

Germany's Mannesmann is investing heavily in teleco

to confront their structural problems whether they want to or not. Says Hans Tietmeyer, the just-retired president of Germany's Bundesbank: "[Governments] have to realize that the euro has ushered in a competitive society." In effect, European countries can't use cheap money and devaluation to prop up ailing welfare systems.

Europe's companies and markets are demanding change. If they get it, entrepreneurs will finally have the flexibility and low costs they need. It may be hard to believe, but Europe's big chance has arrived at last.

By David Fairlamb in Frankfurt with Carol Matlack, John Ross, Stephen Baker, and Gail Edmondson in Paris and Jack Ewing in Munich

THE CONTINENT IS REALLY CRANKING OUT THE GOODS

Benjamin Disraeli might have had it in mind when he famously complained about "lies, damned lies, and statistics." But making late and patchy productivity estimates by juggling output, employment, investment, and working-hours data is tough—and deciding what they mean is worse.

If you believe the Organization for Economic Cooperation & Development, productivity has grown faster in Europe than in the U.S. for years. Some economists even argue that European workers are more productive than their U.S. counterparts. Using exchange rates that iron out purchasing-power differences, Lombard Street Research Director Charles Dumas says Americans' output is worth \$31.89 an hour, vs. \$35.08 for Germans and \$34.82 for the French. "I was very surprised," he says. "[But] U.S. employees work a lot more hours

than Europeans, so their overall output is far higher."

Turn to American data, though, and the reverse appears to be true. For manufacturing productivity at least, Standard & Poor's DRI and the U.S. Bureau of Labor Statistics both figure Europe has lagged the U.S. most years since 1992—and that U.S. hourly output is growing faster.

TEAMWORK. Still, most number crunchers seem to agree that European productivity growth sped up in the 1990s. The upswing was especially strong in 1997 when, says DRI, productivity in France and Germany jumped by 6.8% and 6.7%, respectively. "Those are remarkable increases for such rigid, high-cost economies," says Darren Rawcliffe, a DRI economist based in London.

European productivity has been boosted by restructuring and rationalization. Consider Finnish manufacturing between 1985 and 1995. Productiv-

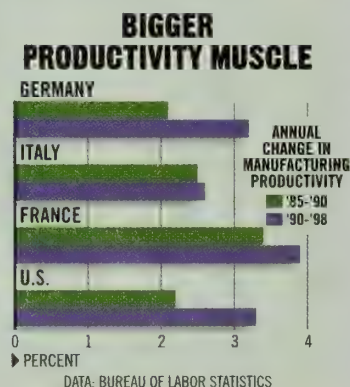
ity zoomed "as inefficient companies abandoned their market share to leaner, fitter operators," says OECD economist Dirk Pilat. Then there was the German steel industry shakeup in the mid-1990s. Survivors such as Thyssen-Krupp have raised productivity substantially. The company's workers can today make a ton of steel in four hours vs. six hours in 1995.

Whatever the cause, recent productivity increases show that European companies are in good shape. Growth may have been lackluster, but corporate earnings have surged 84% since 1994, almost as fast as in the U.S.

Now, the big question is whether Europe can keep making U.S.-size gains. Since leaping at a 7% annual rate at the start of 1998, manufacturing productivity in Europe has slowed to 0.4% growth early in 1999.

Many economists figure that's just a blip. If so, further deregulation, more mergers, and new technology will rekindle productivity growth. "This is a temporary slowdown," says Elisabeth Waelbroeck-Rocha, a DRI economist in Brussels. "Productivity will soon be speeding ahead again." Europeans hope she's right.

By David Fairlamb in Frankfurt



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INDONESIA

A PARIAH STATE?

As the world recoils from the violence in East Timor, a political crisis could erupt in Jakarta

It has become one of the most disheartening horror stories in global diplomacy. Just four months ago, Indonesia seemed to be finally putting its shattered economy and political system back on track. Millions of Indonesians celebrated the downfall of strongman Suharto by overwhelmingly voting against the ruling party in the first democratic elections in four decades. The Indonesian military, under the seemingly enlightened leadership of a soft-spoken, sure-footed general named Wiranto, seemed ready to yield to civilian leadership. Thanks to reforms mandated by the International Monetary Fund, the economy showed signs of recovery. And the long-brutalized population of East Timor won the right to vote for independence from a lame-duck President who craved international respect.

The world community—the international lending agencies, the U.N., Western governments—wanted desperately to

believe Indonesian military and political leaders when they said all these reforms would be carried out. The unfolding tragedy of East Timor has shattered that belief.

Even as Jakarta promises to allow foreign peacekeepers to restore order, the horror has not ceased. By the latest U.N. estimate, rampaging militias and Indonesian soldiers have slaughtered at least 7,000 civilians for exercising their right to vote on Aug. 30. A staggering 600,000 people—three-quarters of East Timor's population—have been forcibly

driven from their homes. "It reminds me of Rwanda," says a shaken senior U.N. official.

STUDENT PROTESTERS AT THE FEET OF SOLDIERS IN JAKARTA

Whatever the motives of the hardened men who run Indonesia, it is clear that the damage to this Asian giant will be immense. Nothing is certain longer—the country's passage to democracy, its economic recovery, even who is running the government now. With relations with the International Monetary Fund already inflamed over a banking scandal, Indonesia is on the verge of being cut from new loans that are needed to stabilize the financial system. Economists have lower forecasts for this fiscal year, from 2% growth to negative 0.8%. Ethnic Chinese businessmen, still traumatized by deadly rioting in 1998, are moving funds offshore again. As the international backlash mounts, Indonesia is close to being branded a pariah state.

A new political crisis now looms in Jakarta. Withering international criticism of Army Forces Commander-in-Chief General Wiranto could undermine his hope of becoming leader in Indonesia's next administration. And the milita-

EAST TIMOR: HOW IT HAPPENED

JANUARY Indonesian President B.J. Habibie offers East Timor a referendum on independence.

FEBRUARY U.N. officials hit the ground in East Timor, detect evidence of Indonesian troops cooperating with pro-Jakarta militias.

APRIL U.N. negotiators agree on voting system, but must allow Indonesian troops to provide security.

AUGUST Ballot is held on Aug. 30. Votes are counted centrally in Dili, preventing army from identifying pro-independence districts.

SEPTEMBER After the U.N. announces 78.5% vote in favor of seceding from Indonesia, pro-Jakarta militias begin orgy of violence. Habibie invites U.N. peacekeepers to East Timor to stave off economic sanctions. U.N. estimates of death toll: 7,000.

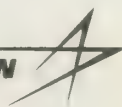


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LOCKHEED MARTIN



analysts fear, could try to seize power if it comes under too much pressure. That could send the economy into a new crisis as confidence collapses and international aid halts. Already, on Sept. 13, new Deputy Armed Forces Commander-in-Chief Admiral Widodo told top officers from Indonesia's 27 provinces that the assembly charged with selecting the next president in November may be postponed because of nationwide unrest. "The military is becoming very dangerous," says Luksama Sukardi, aide to presidential front-runner Megawati Sukarnoputri.

Adding to the pressure is the likelihood that the U.N. will form a war crimes tribunal to investigate the East Timor massacres. One question will top the agenda: Was there a clear chain of command from Wiranto's office in Jakarta to the provincial commander in Dili, Timor's capital, and down to the district chiefs who organized and paid the militias? "We will gather more evidence from atrocities committed in just 10 days in East Timor than in the past 24 years," predicts one U.N. official.

Certainly, many of the parties involved, the U.N. included, had reason to expect the worst. Wiranto said in private meetings a week after the referendum that he knew from the start that East Timor would be a bloody mess.

The genesis of the crisis was Jan. 27, when Habibie said he would give the Timorese a chance to vote for independence. The U.N., which did not acknowledge Indonesian sovereignty over East Timor after the former Portuguese colony was invaded in 1975, wanted the vote to go ahead. If it were not held while Habibie was in power, it feared, later governments could renege.

NO SECRET. But the U.N.'s referendum organizers foresaw trouble the moment they hit the ground in February. They immediately sent detailed reports to superiors in New York and Jakarta saying the army was openly organizing anti-independence militias and supplying them with weapons and "uniforms" of baseball caps and black T-shirts. Copies went to Western embassies and the Indonesian military headquarters.

One report describes a visit by U.N. Mission in East Timor (UNAMET) head Ian Martin in June outside Dili. He saw non-Timorese Indonesian regulars training newly inducted members of anti-independence militia. "Nobody ever had any illusions about the military's backing of the militias," explains a U.N. official.

In meetings in Jakarta and New York before the vote, U.N. and Indonesian officials kept negotiating on security measures. In late April, Jakarta agreed to a vote with secret ballots—but only if Indonesian troops were allowed to provide security. That meant trusting Wiranto to control the army and the militias. "It was a leap of faith," admits Tamrat Samuel, UNAMET's senior political affairs officer. "But if we had insisted on the withdrawal of the Indonesian army, it would have been a dealbreaker."

The U.N. also appears to have miscalculated the extent to which East Timor's 78.5% vote for independence would anger the army. The top brass only went along because they expected

the Dili museum, dumped their cotons on the floor, and mixed them up so the army could not tell which districts were more in favor of independence.

There's little doubt that the militias were set up, run by, and even manned by army regulars. One source, who drove two hours from Dili to the village of Aileu shortly before the vote, met the district chief, a retired army colonel. The official commanded the town's anti-independence militia out of his office. In Dili, he saw soldiers issuing M-16s to militiamen. The army has denied arming militias; Wiranto only admits his troops were "psychologically impaired" from fighting "rogue" military elements. He didn't respond to interview requests.

After violence flared, Wiranto ordered regular army reinforcements that were supposed to suppress the militias. But refugees who were evacuated to Darwin say the troops took off their Indonesian army uniforms at night, donned black T-shirts, and fought alongside the militias. A U.N.-sponsored tribunal on who triggered the killings in East Timor could certainly implicate Wiranto. That won't topple him from power. But it may make life hard for the U.S. and other nations to deal with a regime led by the army's current commanders. Wiranto already seems to have taken control. He now calls daily meetings with Habibie and armed forces brass at the presidential palace on agendas set by army staff.

Meanwhile, Megawati—who has been wooing Wiranto for the presidency—has turned chilly toward him. "Now the military needs Megawati more than she needs the military," contends Megawati aide Subandi. The question is whether she

succeed in asserting her independence from Wiranto—or whether the army forces chief may go for an outright coup.

The buildup of anger does not bode well for business in Indonesia. Standard & Poor's has downgraded Indonesia's currency rating, citing political tensions and the risk that international aid may be cut. On Sept. 10, a group of ethnic Chinese businessmen from Indonesia met in Singapore to compare notes on how much capital they were pulling out, says the chairman of a local conglomerate who attended the meeting.

East Timor has long been treated as a local tempest that could not destabilize the entire country. For Wiranto and everyone else involved, that could prove to be another tragic miscalculation.

By Michael Shari in Jakarta



FRONT-RUNNER
Analysts think General Wiranto (above) may try to seize power, thwarting top vote getter Megawati

the vote to be indecisive, says Harold Crouch, an Australian National University expert on Indonesia. The army then would have a pretext to challenge the vote when parliament met to ratify the results in November. Or it could have sought to partition East Timor, carving special districts from areas where pro-Jakarta sentiment seemed strong.

But UNAMET scuttled the scheme. A day before the Aug. 30 vote, its staff rejected a list of poll observers presented by two anti-independence political parties on grounds that they didn't have time to give them ID badges. The real reason, says a U.N. official, was that "the list of names included known militia members."

Then, U.N. poll organizers trucked all the ballot boxes from 13 districts to

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EDITED BY PATRICIA KRANZ

RUSSIA: HOW TERRORISM COULD BOOST YELTSIN'S RIVALS

Moscow residents watched wide-eyed as rescuers pulled the bodies of pajama-clad children from the rubble of an eight-story building on the city's outskirts. At 5 a.m. on Sept. 13, a bomb destroyed the building, leaving at least 118 people dead. It was the third explosion in the city in two weeks. While no one has claimed responsibility, Russian security agencies blame Islamic rebels from the Caucasus region.

Apart from terrifying Moscovites, the attacks are raising the pressure on Russia's leaders to sky-high levels just as they are gearing up for crucial parliamentary elections on Dec. 19. Presidential elections are scheduled to follow in July, 2000. Rumors are swirling that President Boris N. Yeltsin will use the terrorism as an excuse for calling a state of emergency and canceling the elections. Moscow Mayor Yuri Luzhkov called for police searches of up to 3 million people daily. And Prime Minister Vladimir Putin closed all roads leading from Chechnya into Russia.

TAKE THE BLAME. If the violence continues, almost anything could happen. But for now, most analysts expect the elections to go ahead. Of all the political contenders, Luzhkov and his ally, former Prime Minister Yevgeny M. Primakov, may be in the best position to gain a boost from the disorder. Even though Luzhkov is mayor, he doesn't have authority over most of Moscow's security forces, which answer to the federal government. Federal forces, not the city's 70,000-strong police force, are in charge of the counter-terrorist operation. Luzhkov can let Putin take the blame for not preventing the attacks.

Primakov, meanwhile, is out of office and can't do anything directly to track down terrorists. But he can bolster his already strong reputation as a crime fighter by criticizing the government. "For Primakov and Luzhkov it's perfect. Primakov is a law-and-order man and not connected to the

Yeltsin Administration. And Luzhkov represents stability," says Vyacheslav Nikonov, director of Fond Politika, a Moscow think tank. Both are contenders for the presidency.

Up to now, Luzhkov and Primakov haven't missed a beat. On Sept. 8, Luzhkov announced he was rescheduling the Moscow mayoral election from July, 2000—the same time as the next presidential election—to Dec. 19. That enforces Luzhkov a political role, no matter what he decides about the presidential elections. In 1996, Luzhkov won the mayoral race with more than 90% of the vote, and he could very easily be re-elected.



LUSHKOV: Yeltsin successor?

Luzhkov's decision to rejigger the election closely followed the creation of his alliance with Primakov on Aug. 28. Their Fatherland-All Russia bloc quickly became the country's most popular political party. Polls show Luzhkov likely to win 25% of the seats in the parliamentary elections, snatching control from the Communists. Primakov is the front-runner for the presidential race, according to polls, with Luzhkov third after Communist Party leader Gennady A. Zyuganov. Putin, Yeltsin's preferred successor, trails way behind.

Luzhkov may work behind the scenes to quell Moscow's violence. The Mayor has ties with Moscow's Chechen business elite, and the city has partnered with some of the most high-profile commercial deals. He successfully used this relationship to end a short spate of bombings in the mid-1990s during the Chechen war. If Luzhkov's lobbying is effective again, he will boost his reputation as a can-do mayor even further. But the longer the violence continues, the greater the chances Yeltsin may be forced to declare a state of emergency and even cancel the elections. That goes against his political instincts. But these days in Russia, terrorists seem to hold the cards.

By Margaret Coker in Moscow

GLOBAL WRAPUP

A FIGHT OVER FRENCH JOBS

► Socialist Prime Minister Lionel Jospin faces pressure from fellow French leftists to penalize tiremaker Michelin, which plans to lay off 10% of its 75,000 European workers in a bid to boost productivity. Jospin, while calling the layoffs "shocking," says the government should not intervene. But Communist and Green party lawmakers say he should force Michelin to make large payments to cushion the economic impact of employment losses and should bar the tiremaker from re-

ceiving government subsidies slated for next year to ease the transition to a mandatory 35-hour workweek.

The controversy is thorny for Jospin, who has made job creation his top priority but has generally avoided meddling with market forces. To take the heat off, the Prime Minister is calling on unions and workers to mobilize themselves.

END OF A COLD WAR?

► There are tantalizing hints that the U.S. is trying to improve long-frozen relations with Iran. According to Mid-

dle Eastern press reports, President Bill Clinton recently wrote a letter asking Iran to extradite two suspects in the 1996 truck bombing of a U.S. military barracks in Dhahran, Saudi Arabia. Other high-level contacts have taken place between Iranian and U.S. officials in Europe.

News of the communications, which the U.S. has acknowledged, has caused an uproar in Iran and put the moderate government of President Mohammed Khatami on the defensive. The flap could halt the initiative before it really gets under way.

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As the state sector crumbles, dynamic private companies are taking up the slack

Zhang Yue, the normally taciturn chief executive of privately owned Broad Air Conditioning, jumps up from his desk and rushes to his office window. It is a grey, drizzly August afternoon on the outskirts of Changsha, a sprawling central Chinese city in Hunan province dotted with the smokestacks of ailing state-owned industries and the rice fields of disgruntled, over-taxed farmers. But Zhang, 38, isn't focusing on this bleak scene. Instead, he watches eagerly as his company's Bell 206 helicopter takes off in a whirl from the helipad just outside his window. "It's very useful for company business—and helps to stimulate one's imagination," Zhang says enthusiastically of his chopper.

A decade after Zhang and his brother founded the company, Broad now boasts \$192 million in sales, 1,200 workers, and a reputation as one of China's top producers of large air-

conditioning systems for office buildings. Hunan's largest tax-

Special Report

payer, Broad is so vital to the struggling local economy that a grateful provincial official describes Zhang as "a god."

As China prepares to celebrate the 50th anniversary of the Communists' Oct. 1, 1949, victory over the Nationalist army of Chiang Kai-shek, the pageantry will have a predictable look. A triumphant military parade through Beijing's Tiananmen Square is in the works. Also likely are long speeches by President Jiang Zemin and other top brass extolling the glorious accomplishments of the Chinese Communist Party.

But as the Party bathes itself in the sentimental imagery of past socialist achievements, the unstated irony is that a different sort of revolution is sweeping the nation. Quietly but steadily, private companies such as Broad are becoming the backbone of China's economy. While thousands of state-owned factories still languish with massive debts, red ink, and bloated workforces, maverick entrepreneurs are picking up the slack, generating badly needed jobs and helping Chinese industry approach world standards in sectors ranging from electronics manufacturing to Internet services. The private sector won't solve all of the serious problems left by the old socialist system, which will hang over China's economy for years. But it is starting to offer glimpses of a more dynamic, globally competitive economy that may lie in China's future, provided leaders don't again try to roll back the clock.

The private companies now emerging are a major step forward from the tiny private firms that started sprouting in China after late paramount leader Deng Xiaoping launched his economic reforms in 1979. Most of these outfits were mom-



CHINA'S NEW



and-pop eateries, small factories, and repair shops; the new generation of private companies are large, complex enterprises often engaged in sophisticated manufacturing and services.

These firms are also openly independent of the state, run by owner-operators who cherish their freedom. That's an advance from the murky front-companies for military and provincial governments that have long characterized Red Capitalism: For example, the "red chip" corporations traded on the Hong Kong exchange are all state-controlled conglomerates. It is only in the past few years, in fact, that Beijing has conceded private enterprise a legitimate role in the national economy. Thus, capitalists lived in an ideological netherworld. Many companies that presented themselves as independent, such as Beijing's Legend Computer or appliance-maker Haier, are in fact hybrid ventures in which government bodies were heavily involved. And many companies that classified themselves as village enterprises or foreign ventures were actually privately owned but disguised themselves to avoid taxes and official meddling.

From those embryonic early years of private capital formation, however, China is starting to produce substantial, fully formed private corporations. Their founders and senior executives come from a broad sector of society, from peasants' sons to managers who cut their teeth in foreign ventures to academics who are abandoning government institutes and young engineers who studied and worked in California's Silicon Valley.

These entrepreneurs have all struggled to raise capital for their ventures, and some of their fund-raising techniques remain obscure. They have often relied on family funds, or underground lending syndicates that charge scarily high rates for loans. But as they become more established, some entrepreneurs are starting to secure capital from sources long reserved for state enterprises—such as government-owned banks and the stock market. And they are pushing into more economically important and politically sensitive sectors, often with Beijing's tacit approval. These firms are convincing Beijing that China's best hope of producing new engines of growth rests on the country's ability to nurture startups, rather than on blueprints drawn up by government planners. The leadership "has seen evidence of the vitality and dynamism of the emerging private sector," says Goldman Sachs (Asia) economist Fred Hu. The shift "is irreversible."

Without question, China's business class has come a long way since the Deng era. Although the hybrid firms were a big break from socialism, authorities were more willing to shower favors like cheap loans and land on companies in which the state had a stake. That largesse often prevented companies from becoming truly competitive—and fed enormous waste.

Government-owned companies that all but monopolized business a decade ago make up only 47% of the economy today. Meanwhile, the private sector—not counting farms and the operations of foreign investors—accounts for as much as 40%, according to the China Economic Quarterly, an independent journal. In Shanghai, the number of private enterprises exceeds 111,000,

BOOMING
China's big
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entrepreneurs

REVOLUTION



according to the Shanghai Private Enterprise Association.

If those numbers are accurate, then the private sector is making enormous strides—especially since government companies still monopolize such key industries as banking, telecom services, and wholesaling. One factor boosting these numbers is that many companies have ceased to disguise their truly private nature. Until recently, many “foreign joint ventures” were controlled by domestic entrepreneurs through Hong Kong shells. Other entrepreneurs felt they had to register their companies as collectives just so local clients would do business with them. “Now I have

Special Report

thrown away my ‘red cap,’” says Zhou Fusheng, founder of \$1.2 million signmaker Shanghai Dasheng Industry & Trade Co., who termed his company a “collective” in its early years. “I’m not afraid to be a private businessman anymore.” Also, a wave of privatizations by cash-hungry provincial and municipal governments have placed thousands of factories and service companies in private hands.

THE BEST HOPE. The implications for China, where the claim that the state is the core of the economy remains embedded in Communist Party dogma, are earthshaking. Not only does raw capitalism raise new questions about the legitimacy of the party’s monopoly—it also underscores the desperation that the Chinese leadership now faces over the economy. Simply put, President Jiang Zemin, Premier Zhu Rongji, and others recognize that the private sector offers the country’s best hope as an engine of growth. As state firms shed workers and shut plants, new businesses are urgently needed to generate millions of new jobs.

Indeed, the largely hidden role of a vibrant, efficient private sector may help explain why Chinese growth continues to be as high as it is, despite the losses at state factories. In five years, more than 60% of the economy will be in private hands and employ some 75% of China’s workforce, says Zhong Jiyin, an associate professor at the Chinese Academy of Social Sciences.

China’s leadership is reacting

“RED CAP”

Zhou Fusheng had termed his outfit a “collective” to get clients

panies than from loss-making state enterprises, which caused their political influence to secure breaks.

But Beijing is also merely catching up with reality. In such progressive coastal provinces as Zhejiang and Jiangsu, the local economy is almost entirely in nonstate hands. Even in backward inland provinces, major changes are afoot.

Take inland Hunan, once known only for its depressed economy. Now, besides Broad Air Conditioning, Hunan also boasts private companies such as Yada Chemicals and software developer Powerise. China Construction Bank, which is only tackling its bad debt, is eager to lend more to such private enterprises. “For many private companies, our risk is very low,” says Peng Maowu, general manager of the Hunan branch of China Construction Bank. Private enterprise in Hunan is growing at a booming 20%, compared with 4% for state enterprises. Vice-Governor Zheng Maoqing says the nonstate sector, which employs 2.3 million people, plays a crucial role in re-employing laid-off state workers. “In the future, state enterprises will play a role in strategic industries,” he predicts.

For a look at a sector no longer deemed strategic, travel

the private factories of booming Zhejiang. There, in the coastal city of Wenzhou, home to China’s earliest private entrepreneurs, a purely private electronic parts industry has sprung up. Much like the boom of two decades ago, countless factories pump midtech goods such as adapters, circuit breakers, converters for domestic consumption and export.

These outfits have grown beyond backyard factories. Take companies such as \$100 million Chint Group Corp. and \$245 million Delixi Group Corp. Both were started by local

CHINA’S NEW PRIVATE SECTOR

HOW IT’S DIFFERENT These are truly private companies, unlike many businesses that are controlled by state-owned enterprises, ministries, and local governments. And these private companies, unlike family-run shops, are acquiring sizable revenue and market share.

WHY IT MATTERS A real private sector can hire and fire at will, pay taxes, and respond to market forces much faster than state-connected firms.

THE RISK IT FACES Raising capital is always a problem. So is the temptation to diversify. And Beijing may still lean on them and limit their ability to operate independently.



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farmers' sons who dropped out of elementary school and who broke into the business by selling components. After starting their own factories 15 years ago, both recently got permission to take over ailing state enterprises around the country. These companies each export more than 10% of their products and have dominant market shares at home.

Beijing now realizes that domestic companies such as Chint and Delixi are the only hope against the many multinationals like Siemens, ABB, and Rockwell now pushing into the China market. "In some areas like electronic parts, state enterprises will be sold to private companies like us, and the government can withdraw," says Chen Jianke, vice-president at Chint Group. His company has taken over three state companies, all with strong technology and products but with management problems and debts. Chint turned them around by trimming their payrolls and cleaning up their finances. Capital is flowing more freely now to these private superachievers. "We're now one of the best customers of Agricultural Bank of China in this province," says Delixi Vice-President Hu Wei.

Entire high-growth sectors such as software, biotech, and the Internet are up for grabs, and private companies are likely to take most of the spoils. Shanghai-based Fortune Group started in 1992 with a \$480 investment by five graduates of prestigious Fudan University. The quintet, most of them biology graduates, started by selling a pharmaceutical product that

tests for hepatitis, a major health problem in China. Now the group's seven compa-

Special Report

nies are involved in everything from pharmaceuticals to real estate. Fortune's pharmaceuticals group, with \$60 million in sales and \$7 million in profits, became one of China's first private companies to go public last August. "We were a test case to see whether private companies could really succeed in the stock market," says Chairman Guo Guangchang, 31. Its shares have leapt fivefold since the listing.

HARD KNOCKS. The private sector may even succeed at encroaching in industries once under the strict control of the state—like the mass media. Hunan Television & Broadcast Industry Co. became the first media company to secure a stock-market listing earlier this year when executives convinced securities regulators that it needed to raise private capital to meet the new challenges of the broadcast and print industries. The company plans to expand into cable television and the Internet. "It is a breakthrough," says Hunan Television chief Long Qiuyun. Already his company has taken over a cash-strapped economics newspaper from the Central Party School, and plans are afoot to acquire other publications.

Succeeding as a private company in China is far from easy. Already, companies like those in Wenzhou's electronic parts industry are struggling to make the transition from small, family-run outfits to larger corporations with sophisticated production, technology, and management. With that in mind, Delixi is starting to outsource production of some components to other companies. "If we want to perfect our product, it's impossible for us to do everything," says Vice-President Hu. Chint and Delixi are even establishing outside boards of directors.

Both companies also have had their share of hard-knock lessons. Like countless state and private enterprises, Chint and Delixi in the early 1990s expanded into everything

THE LONG MARCH TO CAPITALISM

1900-1930s Capitalism flourishes in foreign-controlled coastal cities such as Shanghai, which

down as Mao Zedong prepares for the disastrous Great Leap Forward.

1966 Old businessmen and their families are targeted and classified as "landlords" at the onset of the Cultural Revolution.

1978 Deng Xiaoping rises to power, launches major reforms, and opens doors to the outside. Farmers are allowed to sell some produce on the open market.

1990-92 China sets up its first stock exchange in Shanghai and Shenzhen, and Deng calls for rapid free-market reforms. Thousands of "red capitalists"—usually Communists—



THE BAD OLD DAYS: European Shanghai

emerges as a leading Asian financial and commercial center.

1949 Communists win power. Most industrialists flee to Hong Kong and Taiwan. Mao Zedong assures remaining businessmen the government will buy their assets or let them operate joint ventures.

1951 Following onset of the Korean War, Communist policies turn more radical. Crackdowns on intellectuals and capitalists grow intense.



RED CHIPS: The early

officials and their families—emerge to seize opportunities. But Beijing insists the state play the paramount role in the economy, and most businesses are linked to government bodies.

1997 Chinese President Jiang Zemin and other Communist leaders for the first time officially embrace private enterprise and announce plans to sell off thousands of state industries at the 15th Party Congress.

1999 Acknowledgment of the private sector is written into China's constitution, and the government issues laws delineating the rights and responsibilities of private businessmen.



SIGNS OF THE TIMES: Mao was God

1956 Virtually all farms have been converted to giant rural communes, and urban private businesses have been shut

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from coal-mining machinery to clothing and real estate. After several tough years, Delixi was forced to sell off most of its new businesses and focus anew on electronic components. "Private companies must be very, very careful," says Hu. "There are many enterprises that have failed because of too-rapid diversification."

Special Report

It's also hard to know how far some of the most outlandish firms can go as they bounce from one venture to the next. Chen Rong, president of Zhonglu Group, started out with a small-scale apparel factory, switched to stock speculation in the early 1990s, then went into bowling equipment. "Since state enterprises didn't care to enter the bowling business, it was a blank slate," says Chen. Now he wants to branch out into investment banking, biotech, even the Internet. So far, he's been successful. But playing

the field this way is a tough formula for the long

Finally, there is always the danger that Beijing will again swing back to conservatism. With much of the leadership formed in the Soviet mold of stodgy state bureaucracy, much resistance remains to letting go of key strategic sectors such as telecom. Nervous about too much exposure, companies like private, Shenzhen-based telecom-switch manufacturer Huawei try to avoid the limelight. In the absence of a solid legal system, entrepreneurs still risk being squeezed by capricious local officials.

Despite such worries, entrepreneurialism is now looking like China's best hope. As the top leadership prepares to herald 50 years of running China at the celebration in Beijing, the real party may be starting elsewhere, as private enterprise triumphs in the cities and provinces across the country.

By Dexter Roberts in Changsha, with Sheri Prass in Shanghai and Mark L. Clifford in Hong Kong

THE VERY MODEL OF A MODERN CHINESE JUGGERNAUT

The carefully manicured grounds of Broad Air Conditioning stand in stark contrast to the jumble of small factories and scattered patchwork of rice paddies outside Changsha, Hunan. With its whitewashed buildings and neatly paved roads, the factory compound is a mini-city where most of Broad's 1,200 employees live and work.

Broad's chief, 38-year-old Zhang Yue, a former elementary school teacher and lover of Chinese calligraphy, wants to stand out by making his \$192 million company markedly different in management, production, and finances from the mass of China's ailing state enterprises. He aims to create a company spirit more akin to that of a Japanese or Korean outfit than the typical loosely run Chinese enterprise. Broad's workers must undergo 10 days of boot camp, at which a retired army sergeant supervises punishing six-mile runs to instill esprit de corps. Broad insists workers live in company-provided dormitories and requires a neatly pressed and freshly laundered company uniform.

DECADE OF GROWTH. This saga started 11 years ago, when Zhang Yue and his younger brother, Zhang Jian, an engineering student, patented a special technology for boilers, ensuring that the volatile machines wouldn't blow up—a common problem for the shoddy state-manufactured ones then available. They quickly sold that technology to 20 companies, and with some \$4,000, Broad Air Conditioning was born.

That initial grubstake has allowed

Broad to finance a decade of expansion that has made it into one of the country's largest fully private enterprises. Continuing royalties, as well as a tightly run business, have allowed the company to expand without taking on bank debt. That's a rare feat in China, where most state companies have fu-

for its product reliability and quality. The next step is to start exporting to the U.S. and Europe.

Despite those big plans, it's not going to be easy for Broad to avoid the problems created by the turbulent Chinese economy. Two years of deflation have also hit prices in his indus-



NEW ORDER Zhang is filling Broad Air with Japanese-style team spirit

eled their growth with often reckless bank borrowing. "We rarely think about government policy and how it affects us. We rely on ourselves," says Zhang.

Broad sells a range of large central air-conditioner and heating systems at \$300,000 to \$500,000. That's 20% more than competitors charge, but the difference pays for itself because of the energy efficiency involved in using natural gas instead of electricity. Today, the company has snapped up more than 80% of its sector of the national market and won kudos across China

try, leading to a 20% drop in Broad's revenues in 1998 over the year before.

Zhang declines to reveal profit figures but says Broad is still in the black. He hopes that a turnaround in the construction sector is ahead and that Broad's emphasis on quality will bring in large numbers of customers again. His big advantage is that, unlike other entrepreneurs, he has not lost his focus on his core business. And he's not burdened with the debts and costly benefits programs that state firms shoulder. But even for one of China's best private businessmen, the struggle never ends.

By Dexter Roberts in Changsha

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SKECHERS HAS TO WATCH ITS STEP

Parallels with L.A. Gear make Wall Street wary

A debate is raging in the daily design meeting of hip footwear company Skechers USA Inc. To launch its latest line of girls' running shoes, with a clean look aimed at a wide audience, designers are arguing for a model using a simple white-leather top. But Chairman and CEO Robert Y. Greenberg, the man who gave America L.A. Gear sneakers and helped popularize clunky, big-soled shoes, has locked on to a jazzier version made of bright blue mesh covered by shiny plastic. "There is no contest," insists the wiry, white-haired Greenberg. Glancing at the white shoe in a display room at his Manhattan Beach (Calif.) headquarters, he says: "This is pushing a car up a hill with a piece of rope. Girls don't need us for this." He holds up the electric-blue shoe. "They need us for this. This is pretty."

Picking cool shoes is Greenberg's life. From earlier days, when he screwed roller skates onto running sneakers and sold them at Venice Beach, Greenberg could always create and hawk a hot product. The same, however, can't be said for his ability to run a company. His biggest empire, L.A. Gear Inc., grew into the third-largest sneaker company almost overnight in the 1980s. Then it flamed out in the early 1990s as the brand became passé and the company, faced with mountains of unsold shoes and questions about its accounting, had to restate its results. Now, Greenberg, 59, is riding another rocket with Skechers. The similarity with the early years of L.A. Gear is breathtaking—and for many investors, scary.

STREET LINGO. Seven-year-old Skechers—its name is street lingo for a wildly energetic person who can't sit still—has more than tripled its sales in three years, to \$372.7 million in 1998. That's largely thanks to Greenberg, who correctly foresaw what \$9 billion Nike did not: that kids wanted rugged leather shoes and boots to go with fashionable cargo pants and khakis, not just white

athletic shoes. This year should bring another 29% jump, to \$480.3 million, estimates Harry G. Katica, an analyst at Prudential Securities Inc. He expects 1999 operating income to soar to \$51.6 million, up 52% from last year, and light-years from the \$1.8 million it earned in 1995.

Propelled by a heavy dose of music-laced lifestyle ads on MTV, ESPN, and

GREENBERG:

He foresaw the demand for rugged footwear

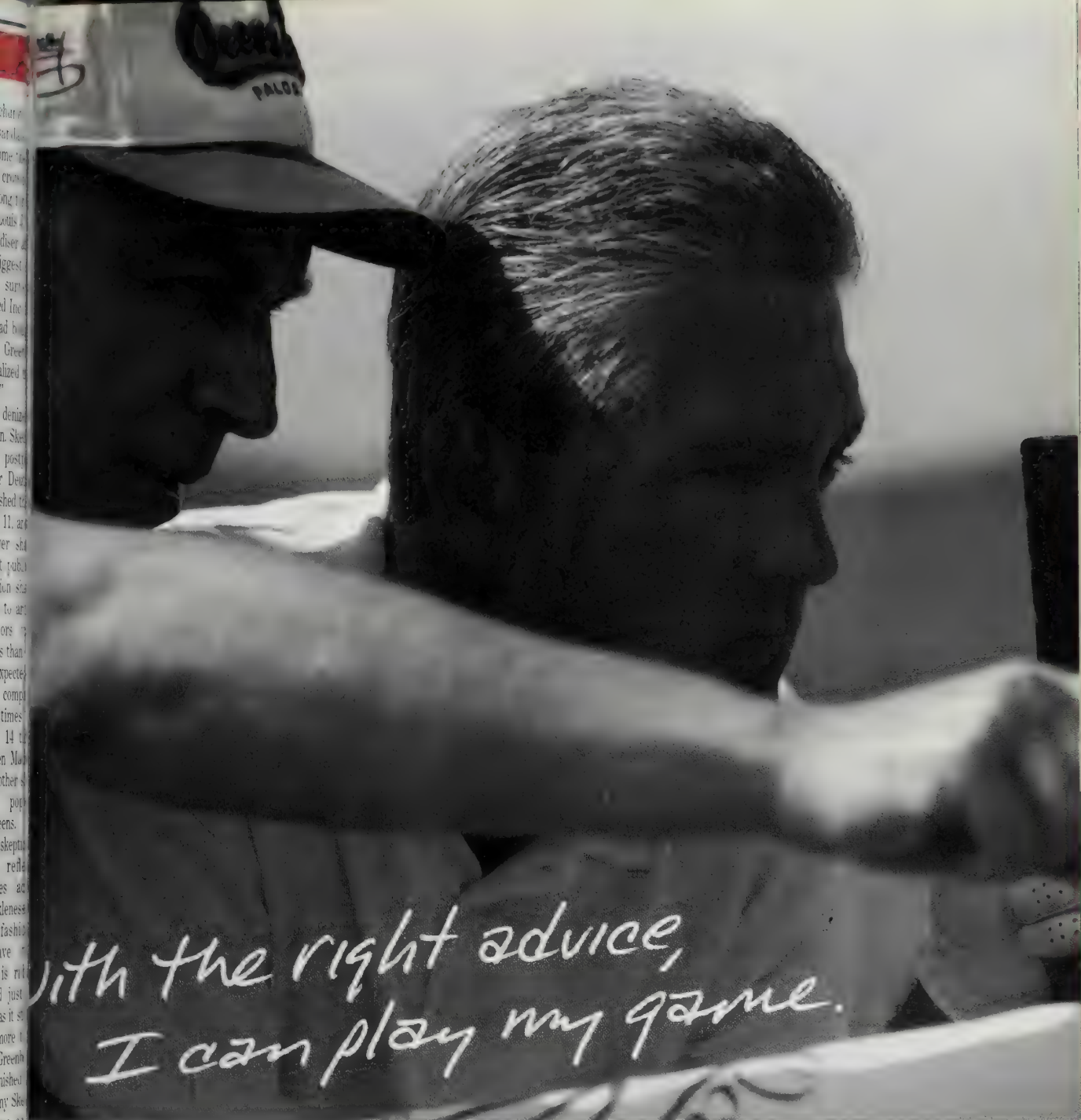


Nickelodeon, Skechers' chunky sneakers, cleat-heeled sandals, and blunt-toed boots have become the brand of the Dawson's Creek crowd to-school right now," says Louis J. Jr., head footwear merchandiser at Penney Co., the second-biggest of shoes in the U.S. A survey by Teenage Research Unlimited Inc. that 17% of 2,000 teens had bought a pair in the past year. Says Greenberg, "We are becoming immortal in the minds of 3- to 25-year-olds."

Too bad the middle-aged denizens of Wall Street aren't as smitten. Skechers' initial public offering was postponed once, and underwriter Deutsche Banc Alex. Brown slashed the offering price by \$3, to 11, and offered 4 million fewer shares. Skechers finally went public on June 9, selling 7 million shares. The price fell steadily, to around 5½ today. Investors

Skechers at less than ten times its expected earnings, compared with 25 times for Nike and 14 times for Steven Madden Ltd., another sneaker maker popular with teens.

The skeptics are partly reflecting anxieties about the fickleness of youth fashion. The wave Skechers is riding could end just as abruptly as it started. But more than anything, Greenberg is being punished for his past. Many Skechers executives came from the old L.A. Gear, including David Weinberg



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Greenberg's 36-year-old son Michael, who was L. A. Gear's national sales manager and is now Skechers' president. Altogether, five Greenberg offspring sport executive titles, which worries some. "I wouldn't go near any company run by Robert Greenberg," says a private investor who followed L. A. Gear as an analyst. The parallels between the companies, he says, are "frightening."

UNFAIR NOTORIETY. Greenberg accepts his notoriety, even though he thinks it is unfair. He blames many of L. A. Gear's troubles—and its reorganization last year under bankruptcy law—on the investment team he turned to in 1991, after sales and the stock price had started to tank. One executive involved in the investment transaction admitted that serious marketing miscues were made after Greenberg resigned in 1992. But he says the company was already in free fall. "Robert lost control of the company," says the executive, who asked not to be named. "We inherited a mess." Indeed, shortly before Greenberg left, the company had to restate quarterly financials for part of 1990 and '91. It acknowledged that some shipments were improperly recorded as sales, and that it



Investors value
Skechers' stock at far
less than Nike or
Steven Madden

had suffered losses for the period. Today, Greenberg sees Skechers' climbing sales as his best chance for redemption. "It may take several quarters of results, but perception will turn," he says. And certainly no one should underestimate Greenberg. A former stylist, he got his start in the fashion business back in 1968, when he sold a chain of salons in Brookline, Mass. He then launched a line of fashion wigs and designer jeans. By 1979, Greenberg had moved to Los Angeles, where he opened up a skate stand at Venice Beach. A score came when he sold \$3 million worth of E.T. shoelaces. Greenberg used the money to open a small clothing manufacturer called L. A. Gear. He imported 30,000 brightly colored sneakers from a factory in China, then latched on to the hot market for women's aerobic shoes. L. A. Gear's sales exploded from \$70 million to \$900 million in three years.

After he left L. A. Gear, Greenberg started a company to distribute Dr. Martens—the clunky British shoe manufacturer, R. Griggs Group Ltd., recently sued Skechers, claiming it produced knockoffs. (The case is pending, but Greenberg has countersued, asserting that Griggs falsely claims to make

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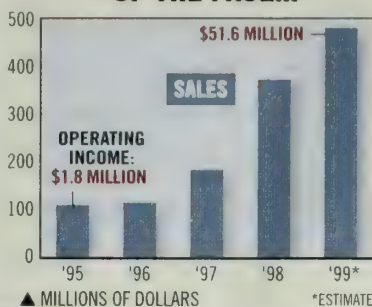
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es in Britain.) Soon, enberg and his sons nched their own nds and began to fo- on Skechers. "Rob- has the ability to over trends and get board faster than one I have ever," says Steven Nich- CEO of K-Swiss Inc. Westlake Village, lif., another hot aker maker.

BUCKS. But can keep it going? ile there is no of the account- problems that quied L. A. Gear, lysts saw a sign in echers' prospectus t it, too, might have ables keeping the red-hot momentum ng. The company's order backlog pped 16% this spring from '98 lev- Declining backlogs are often a sign manufacturer inventory is piling up stores, says Faye Landes, an analyst h Thomas Weisel Partners, an in- tment bank in San Francisco. How-

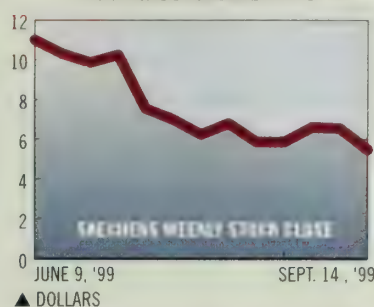


SKECHERS PICKS UP THE PAGE...



DATA: SKECHERS USA INC., PRUDENTIAL SECURITIES INC., BLOOMBERG FINANCIAL MARKETS

...BUT INVESTORS GIVE IT THE BOOT



it dressed up in a myriad of treatments.

Skechers is offering 900 different styles this fall. "We aren't associated with any single category of footwear," Greenberg insists. "We're just cool."

Of course, that puts a very hefty premium on staying ahead of the fashion hordes. Skechers' design team of twenty- and thirty-

ever, the company says store inventories are lean. J. C. Penney's Lynn concurs that popularity remains high; the head of footwear merchandising at another big chain agrees, crediting big-bucks marketing. With the company spending 10% of sales on ads and promotions, she says, "it gives them staying power."

Greenberg insists he's keeping inventories tight this time by updating orders from Asian suppliers each week. And he has put his creative people into overdrive to diversify the lineup. L. A. Gear, he says, was essentially a one-trick pony, with one white aerobic sneaker that

some things travels constantly to keep tabs on the latest trends. Greenberg himself keeps his eye on the pavement. According to Michael Greenberg, his dad hasn't seen the last five minutes of a movie in years—he can't resist planting himself in front of the exit to get a glimpse of hundreds of pairs of shoes rushing by. So far, the legwork has paid off. But with Greenberg's track record, investors will have to see much more before they're convinced Skechers is on solid footing.

By Kathleen Morris in Manhattan Beach, Calif.



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A REPORT ON ELECTRONIC BUSINESS

Is Inktomi
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Of The Net?

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The Most Influential People
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BusinessWeek



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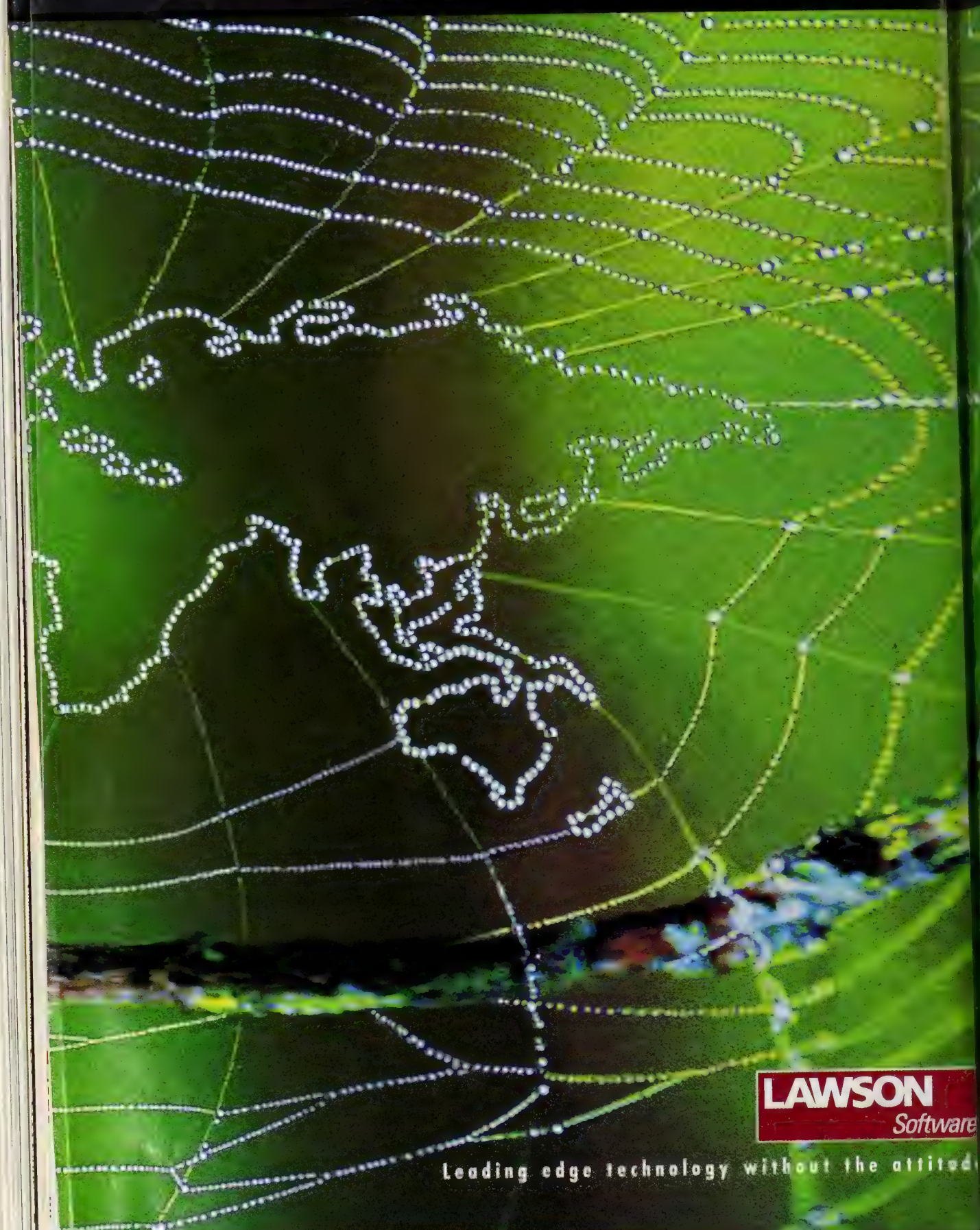
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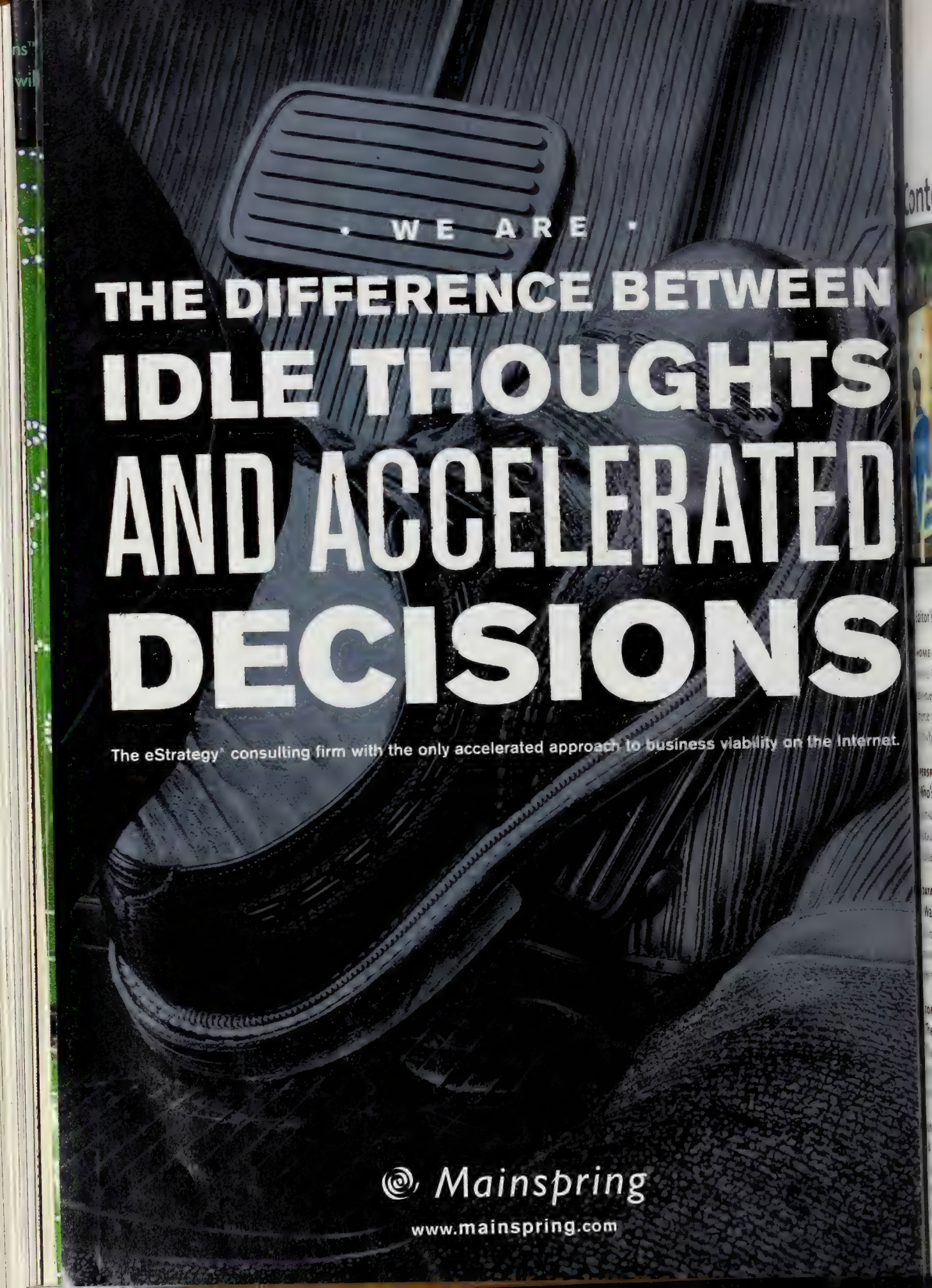


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Masters of the Web Universe

The inaugural BUSINESS WEEK e.biz 25 celebrates the Internet innovators who are doing the most to spark a transformation of society that is as profound as the Industrial Revolution. From such bona fide captains of industry as Yahoo!'s Timothy Koogle to relative unknowns such as Glen Meakem, founder of FreeMarkets Inc., they represent a wholesale redistribution of tech leadership



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ON THE COVER: PHOTOGRAPH BY ALAN LEVENSON, BACKGROUND AND COMPOSITION BY DENNIS CHALKIN



Editor's Memo

KATHY REBELLO, MANAGING EDITOR
kathy_rebello@ebiz.businessweek.com

They're Rockin' The World

I figured that assembling a dozen busy executives from around the world for a joint photo would mean plenty of headaches. The last thing I expected was a dance party. But that's just what happened—as you can see from the cover of this, the inaugural version of our list of the most influential people in electronic business.

When the 12 Netheads—from Seattle, Silicon Valley, New York, Pittsburgh, and even Japan—arrived in San Francisco, the rock music was cranked to the rafters. For our group, this wasn't just background music. They broke loose and gave us a look at the energy powering the e-business revolution. Amazon.com CEO Jeff Bezos was irrepressible—so much so that we asked him to move off the top of a tiered platform onto the bottom step for fear he might tumble over the side with his high kicks. Investors would not have been happy. Yahoo!'s Tim Koogle went *Saturday Night Fever* with not one, but two fingers aloft. And where else would you see eBay's Meg Whitman doing the frug?

It was a hoot. Even putting it together wasn't such a teeth-gnashing task. Getting the planets aligned took a little more than one week. By contrast, coordinating a photo shoot two years ago with 12 of Silicon Valley's finest—including Andy Grove, Steve Jobs, and Scott McNealy—took one month. Ah, finally, we see the upside of Internet time. Our thanks to the rockin' Netheads and to photographer Alan Levenson, who captured the spark behind the Net phenomenon.

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MONDAY

Perspective: Columnist Mike Frazer writes on legal issues and the Net (Sept. 20). Plus: Stefani Eads examines Web.com with high customer-satisfaction ratings.

TUESDAY

Company Closeup: A look at Sweden's pioneering online clothing retailer Daimon.com (Sept. 21).

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Movers & Shakers: A profile of Jay Walker, founder of priceline.com. His radical idea of letting consumers name their own prices is shaking up the marketplace (Sept. 22).

THURSDAY

Street Wise: Sam Jaffe looks at the prospects for eBay's stock (Sept. 23).

FRIDAY

Clicks & Misses: Web-site review of Office Depot.com, OfficeMax.com, and Staples.com (Sept. 24).

ALSO

Watch for daily additions to our Daily Mine, a collection of facts and figures and sample occasional opinion pieces from our staffers, academics, or executives.

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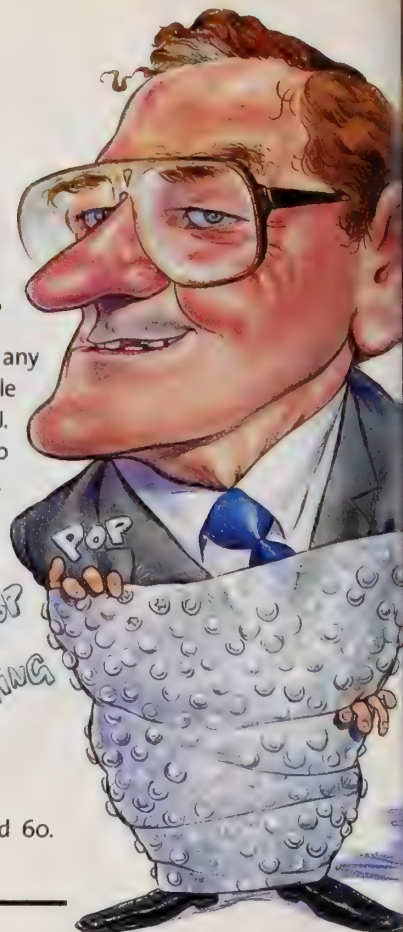
home page

A Net stock with a great pop

Here's one company whose Internet commerce bubble isn't about to bust any time soon: Sealed Air Corp., the Saddle Brook (N.J.) company that makes Bubble Wrap, the clear-plastic packing material that everybody—including Chief Executive T.J. Dermot Dunphy—loves to pop. After all, those items people snap up online have to be shipped somewhere, and they're all going to have to be very carefully wrapped.

Dunphy's lips, however, are sealed. He won't discuss how much of his revenue is generated by e-commerce sales, but some Wall Street analysts consider Sealed Air so primed to ride the online wave that they're calling the firm a "backdoor Internet play." Sealed Air sells its Bubble Wrap, Instapak foam padding, and Jiffy padded envelopes to e-commerce customers such as Lands' End, eToys, and Amazon.com. Analysts say Sealed Air racked up more than \$1 billion in revenues from protective packaging sales last year. They expect sales to grow 9% this year, nearly triple historical levels. Says analyst Joel G. Tiss of Lehman Brothers: "As the Net boosts the amount of stuff getting shipped around the world, all that stuff has to be protected."

Investors agree. The company's stock has surged from 27 last Oct. to around 60. That just proves there's more than hot air in Bubble Wrap. —Marcia Stepanek

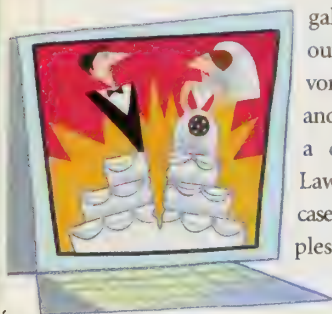


WITH THIS MOUSE, I THEE SEVER

Got a bad marriage but a good modem? Rather than fly to Las Vegas for a quickie divorce, more couples will soon be calling it quits on the Web. Desktop Lawyer, a British online legal service, is scouting out partners for its e-divorce service in the U.S. and Europe. Sound like a cyberscam? Desktop Lawyer has proven its case. Since July, 1,500 couples have paid \$130 to download the software. That's cheap.

British lawyers typically charge \$800.

Desktop's clients simply log on to desktop-lawyer.com to get the software. The package includes a questionnaire that draws up a divorce contract according to the answers. Once customers e-mail the completed documents to Desktop Lawyer, they proceed by snail mail to the courts. With costs this low, maybe divorcees will have enough money left to vacation in Vegas. —Inka Resch

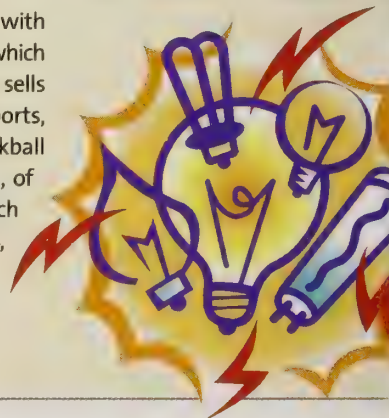


XTREME COMMERCE

You wouldn't imagine Steven Rothschild, the slightly wonky entrepreneur who founded Furniture.com Inc., as a great storyteller. But the 40-year-old really fits the bill with the tale about how he came up with his latest online venture. At home one day, his wife began complaining about what a pain it was to find lightbulbs for their dog pen. That's when the entrepreneur saw, er, the light: bulbs.com, an online service that sells just bulbs!

That's not to be confused with Justballs!, mind you. Justballs!, which is a seven-month-old startup, sells more than 1,700 balls for sports, from \$1.95 Spaldeens for stickball to \$199 billiard ball sets. Then, of course, there's eBags Inc., which specializes in sporting, business, and travel bags. And Shovels.com, Sunglasses.com, and WebTea. Guess what they sell.

What's going on? Extremely tical e-merchants are bucking trend of such companies as Amazon.com Inc. and the shopping eas on portals devoted to widest variety of products imaginable. With extreme verticals, point isn't to offer a wide range of products, but a lot of the same thing. Bulbs.com, for example, says it plans to have 5,000 different types of lightbulbs out of an estimated total market of 7,000. Not that's extreme. —Heather Gre



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BUT WHO HAS
TIME TO FLOSS?

When harried employees of such Silicon Valley companies as Intuit, Netscape Communications, and Cisco Systems are choosing a dentist these days, they use simple criteria: Does the dentist have a) a valid license? b) modern equipment and techniques? c) collision insurance?

Turns out "Internet time" is at once increasing employee teeth gnashing—and diminishing their chances to treat it. So, three years ago dentist Arnold Keiles in Palo Alto, Calif., decided to go to the Web's warriors. He called Winnebago and ordered a custom-built "mobile dentistry unit" with all the latest gadgets, from digital X-rays to a Web-based appointment service. Keiles's company, On-Site Dental



Care, now has six of these \$325,000 mobile units, which hit a couple dozen companies each week and serve hundreds of high-tech employees.

Companies don't pay, per se—they just make sure On-Site accepts their dental plans and then allow the mobile units onto their sites. Backed by local investors, the entrepreneurial Keiles hopes to bring drive-by root canals to other high-tech centers within the next five years. Oh boy. —Joan O'C. Hamilton

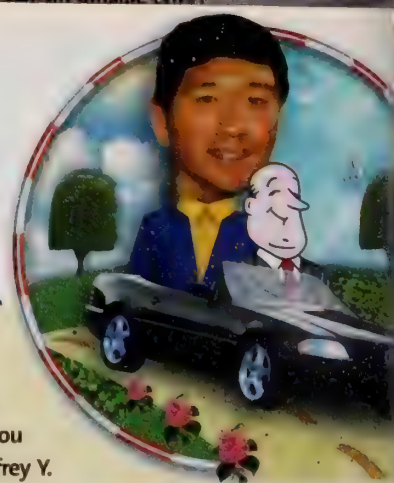
for Jeeves

It's a wild ride

Here's proof the Internet can be just as much fun as TV game shows: Pick the right venture-capital investment and you can win big prizes. Consider Geoffrey Y.

Yang of Institutional Venture Partners in Menlo Park, Calif. When partners at IVP make home-run picks that bring in profits of \$100 million or more, they win, to borrow from TV: "A new-w-w car!" Already, he's driving a Mercedes CL500, thanks to Excite Inc.

Another set of wheels—or more—may be on the way. Yang is responsible for IVP's investments in Ask Jeeves and MMC Networks, which both topped \$100 million in profits before the stocks dropped recently. If they rise again, Yang will get his cars even though he and other IVP partners are forming a new firm with VCs from Brentwood Venture Capital. Yang says he hopes to bring the old tradition to his new firm. —Timothy J. Mullaney

CYBERSQUATTERS IN
THE HIGH RENT DISTRICT

How do you cash in on the Internet gold without putting in 18-hour workdays at a startup? Internet addresses have become the Web's equivalent of real estate speculation.

Web address	DRUGS.COM
Original owner	Eric MacIver, Mesa, Ariz., who wanted to start an online pharmacy
Buyer	Venture Frogs, San Francisco Web investors
Price/Date of sale	\$823,456 / August, 1999
Web address	WALLSTREET.COM
Original owner	Ehud Gavron, the owner of an ISP provider in Tucson, Ariz.
Buyer	Players Sportsbook and Casino off the coast of Venezuela
Price/Date of sale	\$1.03 million / April, 1999
Web address	BINGO.COM
Original owner	Bingo, Inc., an Anguilla-based game company
Buyer	Progressive General Lumber Corp. of Vancouver, which changed its name to Bingo.com Inc.
Price/Date of sale	\$1.1 million / January, 1999
Web address	PORSCHECAR.COM
Original owner	Saeid Yomtobian, a Sherman Oaks (Calif.)-based Internet net
Buyer	Porsche Cars North America
Price/Date of sale	Zero / Transferred to company by court order February, 1999
Web address	PRESIDENTORRINHATCH.COM
Original owner	Joseph Culligan, a Miami private investigator, goading the Senator into passing a law against cybersquatting
Buyer	None yet
Price/Date of sale	Asking price \$45,000

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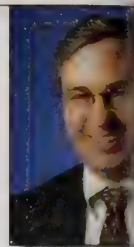
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Who's Afraid Of Online Banking?

Consumers, that's who. But it's becoming a viable alternative to banks

For the past three years, I've been a PC-banking junkie. It takes me 10 minutes a month to pay bills. I can track every transaction online and transfer funds between accounts with a mouse click—or have it done automatically. And I, for one, am surprised—no, shocked—that someone with a PC would not want to bank online. According to a recent survey, Net-only banks and traditional banks operating on the

are doing a lousy job. So bad, in fact, they're sending customers fleeing for the cyberexits.

Here's a statistic bound to wrinkle the pinstripes at WingspanBank.com and other banks on the Web: In the year ended July 31, 3.2 million consumers signed up for Net banking—while 3.1 million closed their accounts. That means the net increase in Internet banking customers was a skimpy 100,000, or 2%, for a total of 6.3 million customers. This is according to Cyber Dialogue Inc., a New York research firm that surveyed 2,000 Net users and non-Internet users. These numbers contradict other studies that show Net banking growing 50%-plus a year. Cyber Dialogue claims that many accounts counted in those studies are probably not active.

BELLS AND WHISTLES. So are the prospects for Net-only banks and traditional banks on the Web bleak? Not at all. Bet on many of the frustrated consumers eventually being wooed back to the Net. That's because as competition increases, banks online are exploiting their sharply lower operating costs to pay higher interest rates on deposits and reduce fees. What's more, competition is forcing cyberbanks to make speedy improvements in service and Web site design. There now are nearly 1,000 banks online, and more are coming: Numerous Net-only banks will be launched within a year, while traditional players like Citibank are building branches in cyberspace. Even brokers such as Schwab are planning forays.

WingspanBank.com is the latest online-only bank to raise the industry bar. Launched in June, the Bank One Corp. spin-off charges virtually no fees, absorbs ATM surcharges of up to \$5 a month, and pays interest on checking of 3.1% for balances between \$1,000 and \$10,000. (Traditional banks often pay less than 1% on such balances.) Its Web site has a host of bells and whistles, including access to mutual funds and brokerage services through a private-label deal with DLJdirect. But it does not yet have certain



services that are available elsewhere on the Net, such as online bill receiving.

Still, Wingspan is a compelling alternative to old-line banks. Many brick-and-mortar banks now make more than 50% of their profits from nickel-and-diming customers with fees. Industry consolidation has reduced competition, and banks are raising the minimum balances required to avoid monthly adding surcharges for certain ATM transactions and paying paltry interest rates on deposits. Consider Wingspan's parent, Bank One Corp.: The bank charges some customers \$2 if they go to a teller for certain transactions that could be made at an ATM, including making a deposit.

That's not to say online banking doesn't have its problems. Some 50%

of those surveyed by Cyber Dialogue said banking on the Net was either too complicated or that customer service was poor. Another problem is that Net banks don't have branches where customers can withdraw money or talk to a teller. And Web banking can be slow because of heavy security measures.

Even the best of the banks operating online have customer service issues. Market researcher Gómez.com ranks Seafirst Network Bank and Wells Fargo as the top two banks on the Net. But customers commenting on Gómez' message board offered a different opinion: They awarded the banks two out of a possible five stars.

Banks online still haven't found their sea legs. But once they get up and running with an account, their advantages are

Net banking eventually save consumers billions of dollars in fees. And you never have to write checks and lick those god-awful stamps again. ●

ONLINE LINK

Interested in an Internet bank? For an analysis of what WingspanBank.com offers, go to ebiz.businessweek.com.

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Heard Any Good Computer Files Lately

If the record business is to thrive, it must embrace the digital-music format

Brian Crissie has eight compact disks, each loaded with about 80 songs by Dave Matthews Band, a popular rock group that Crissie worships. But Crissie, a sophomore at the University of Illinois at Chicago, didn't buy any of these CDs. The songs were downloaded from the Internet and then copied onto recordable CDs by a college buddy. "He had hundreds and hundreds of songs," Crissie

"and I was like, 'Wow, I'd like to be able to do that.'"

Now he can. His brother can, too. In fact, hundreds of thousands of young people across the country have turned listening to downloaded selections into their generation's musical pastime. Like boomers who as teenagers (and later as nostalgic adults) followed the Grateful Dead from concert to concert, today's youth scours the Net for their favorite bands.

Moved by the power of music and the convenience of buying online, young people are expected to push Web music sales beyond \$1.6 billion by 2002. Jupiter Communications Inc. found that 72% of 13 to 18-year-old Internet users had visited music sites in the past year. And of 19 to 34-year-olds, nearly half had done the same in the past month.

Most Web sales these days go to the purchase of CDs. But that's not where

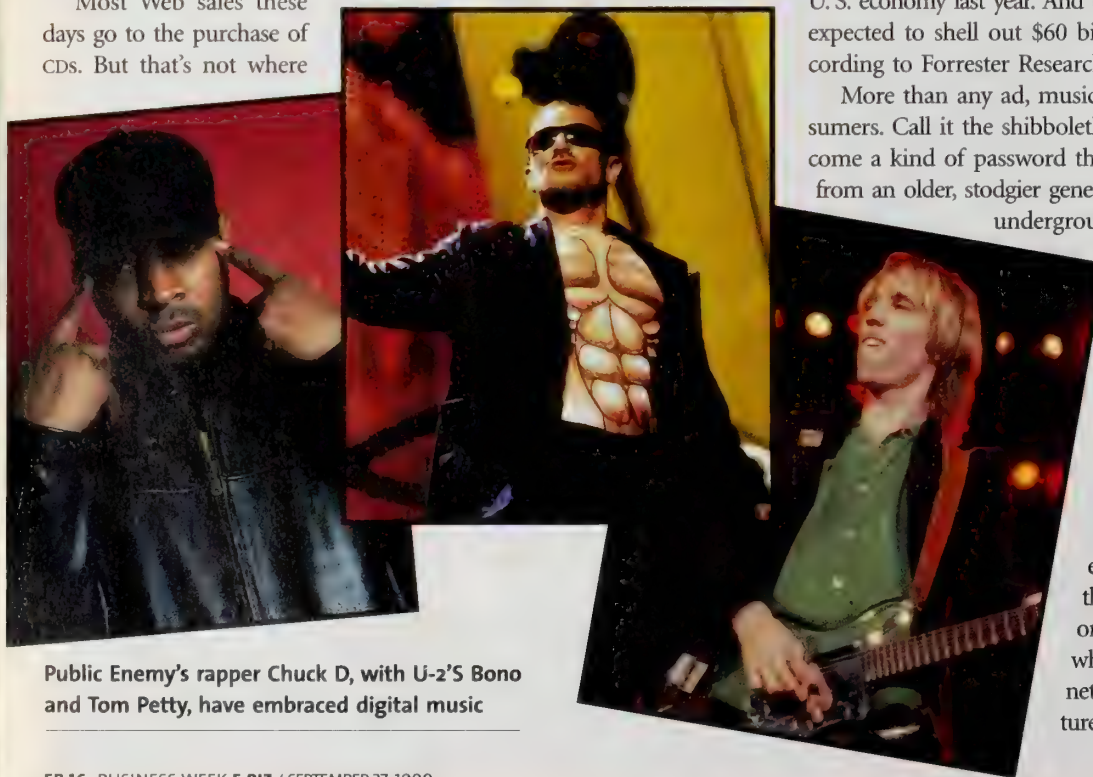
the real promise of Web music lies. At the core of this phenomenon is MP3, a technology that lets Web users compress songs into a digestible format and download them to their computer hard drive. It's mostly a fringe movement for now, but for the music business to succeed online, stores and record labels must overcome their reluctance and embrace digital music.

SHIBBOLETH. If you haven't heard of MP3, either you're not into the Net or you're over 40. But get familiar fast. It's one factor that's driving 18 to 25-year-olds to toss out tape players and hunker down at the PC. So listen up, online merchants: Whether you're a clothing store, a record label, you ought to get hip to MP3—by tying in your sales with ads for concert tickets or distributing songs over the Net. After all, teens pumped some \$150 billion into the U.S. economy last year. And by 2003, consumers 16 to 24 are expected to shell out \$60 billion a year, mostly online, according to Forrester Research Inc.

More than any ad, music is the way to lure young consumers. Call it the shibboleth of today's youth. MP3 has become a kind of password that distinguishes the tech-savvy from an older, stodgier generation. "It makes you part of an underground cult," says Sean Striegley, a 28-year-old

avid 28-year-old computer loader from Orange, Calif. "People think that's cool."

Why? The power of music digs deeper when it comes to young people. For kids, popularity is not identity; it is defined by the bands you listen to. In moments, from our first dance to our first speeding ticket, are marked by songs more than anything else. Music's extraordinary influence gets multiplied when it combines with the Internet. The Net's free and open nature fuses with the appeal of

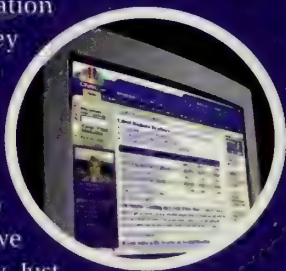


Public Enemy's rapper Chuck D, with U-2's Bono and Tom Petty, have embraced digital music

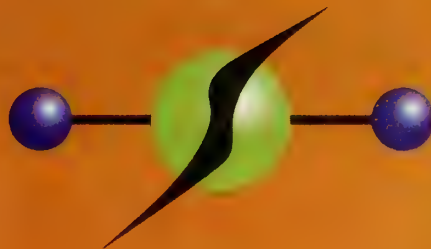
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creating the ultimate in cool. A generation ago, hip college kids had to have a hi-fi stereo. Now, they've got to have a computer, and downloading music sure beats using it to do homework. "I could spend an hour a night, easy," says Brian's twin brother, Mike.

What's more, MP3 appeals to the outlaw side of youth. In truth, most digital music is not downloaded legally. Few bands or record companies authorize it. People find singles from bootleg sites, download them, and the swapping proliferates. "You become a music fan in this insidery way," says John Flansburgh, part of the alternative rock duo They Might Be Giants, among the few bands that have welcomed MP3 as a method of distributing music.

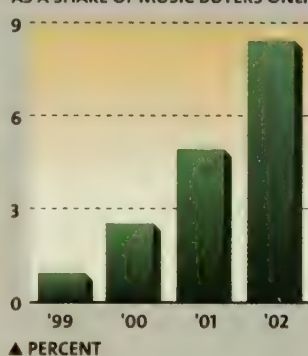
It's Flansburgh's chance to break out. Some 80% of music on the radio and in stores is distributed by the Big Five studios (Sony, BMG, Time Warner, Polygram Holdings, and EMI). Trouble is, after a while it sounds like a stream of homogeneous pap. It's not stuff that compels youth whose interests lie at the creative edges. If you like jazz saxophone, you can always find soprano-sax player Kenny G at the store, but alto blower John Handy won't be so easy to locate. The Web, on the other hand, with its scores of digital music sites, is an "inherently deep catalogue," says Flansburgh. "It's huge."

DOWNLOADING HITS A GROOVE

MUSIC BUYERS ONLINE
(In Millions)

	Total Buyers	Download Buyers
1999	10	0.1
2000	15	0.4
2001	20	1
2002	26	2.2

CUSTOMERS WHO DOWNLOAD,
AS A SHARE OF MUSIC BUYERS ONLINE



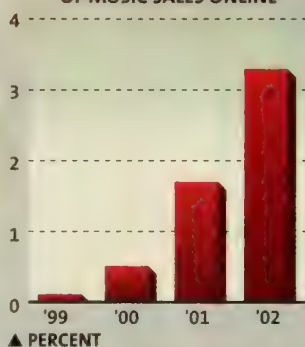
DATA: JUPITER COMMUNICATIONS

GOING PLATINUM ON THE NET

ONLINE MUSIC SALES
(In Millions of Dollars)

	Total Sales	Download Sales
1999	\$327	\$0.3
2000	586	3
2001	986	17
2002	1,600	53

DOWNLOADING'S SHARE
OF MUSIC SALES ONLINE



DATA: JUPITER COMMUNICATIONS

Netrepreneurs and record labels are scrambling to catch up with the craze. Just this summer, several Web companies have gone public, including MP3.com Inc. and EMusic.com Inc., which began trading on the Nasdaq in May. While much of the content they offer is free, some sites sell downloads of single songs for 99¢ and entire albums for \$8. Public Enemy, the platinum-selling hip-hop group, broke ground in late May when it became the first popular band to sell a full album on the Web. Chuck D, the group's leader, won't give sales figures, but the album's first single logged 300,000 free downloads in six weeks. "It's resonated all over the planet," says Chuck D. "For the first time, the public has access to material straight from the artist."

Despite the success of Web sales, the recording industry has been slower to embrace digital downloads. The major labels first dismissed MP3 and are now working behind the scenes to develop technology that can't be easily copied and shared. They've hardly jumped on the bandwagon. "They're all hiding in the barn," says Al Teller, CEO of Atomic Pop, the Web site selling Public Enemy's music.

KILLER APP. Meanwhile, upstart Web sites from Atomic Pop to Ten.com are nabbing artists with profit-splitting deals. Even in the land of vinyl and disks. An established artist can make \$3 to \$5 for each record sold online, vs. \$1.50

through the record company and retail outlets. The major record companies are viewing MP3 as a threat. They view it as an opportunity, says Bob H. Kohn, chairman of E-Music.com.

No doubt digital downloading is more than a late-'90s fad. Music is the distribution of what the browser was on the Internet—a killer app that redefines how business is done. The recipe for success includes basic ingredients: convenience and variety.

MP3 appeals to the outlaw side of youth. In truth, most digital music is not downloaded legally. Few studios authorize it.

As things stand now, downloading is no piece of cake. At the same time, the technology will improve. More important, access will increase once record labels sign artists to distribute music online. That would probably boost record and concert sales. MP3.com sent e-mail to its members who had expressed interest in the rock diva Alanis Morissette, fans bought 40,000 tickets in one day. "That goes to show the power of the model," says Michael Robertson, CEO of MP3.com.

So far, the music conglomerates fear they'll cannibalize their store distribution. What music moguls fail to see is that the Web can complement each other. As Brian Crissie says, even with the digital download, he'll still buy CDs to get all the liner notes, photos, and lyrics. "I want to have it, just to have it," he says.

The lesson also applies to Web merchants outside the music industry. MP3.com's 40,000 ticket sales were done through Ticketmaster. All sorts of retailers can strike deals with digital businesses to market products. For example, MP3.com's download from a jeansmaker or shoe-store site could come packed with a e-coupon for their merchandise. Still, few Web sites have promoted downloadable music on TV, radio, or in print. For MP3.com to come a commercial success, it must reach the masses. "They have to get the message out more," Crissie says, turning down the volume on a Dave Matthews Band song. It's a Gen X thing. The masses might not understand. ●

Name: Darrell Taylor

Profile: Electronics customer/Los Angeles store

Customer history: Purchased portable CD sound system: 6/10 (11:15 am)
Complained "still not loud enough": 6/10 (1:06 pm)
Advised to get SonicBlaster2000 headphones: 6/10 (1:07 pm)

Things to remember: Speak LOUD and clear.



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All you need to know.



by

STEVE HAMM

Masters of the Web Universe

The Internet pioneers of the inaugural BUSINESS WEEK e.biz 25 are changing the competitive landscape of almost every industry in the world

Since the advent of navel gazing, wise men have debated whether economic progress should be credited more to the introduction of new technologies or to the people who put them to exceptional use. It's typically a fruitless exercise—like

trying to figure out how many angels can dance on the head of a pin. But in the case of the Internet, there's something in the yin and yang of man and machine that's well worth contemplating. It's clear that while technology laid the foundations for the Web's first wave, it is sharp thinking by individuals that's powering the second wave—the e-business revolution.

Thus, we offer up BUSINESS WEEK's inaugural e.biz 25. It's our celebration of the innovators and influencers who are doing the most to spark a transformation of society that is every bit as profound as the Industrial Revolution. This is the PC biz times 1,000. That's because these 25 larger-than-life characters, and thousands more who are aspiring to be just like them, are determined to overthrow the old world order. Forget paper, fax, phones, and all those rabid sales people. The Internet

The e.biz 25

ILLUSTRATION BY RON CHAN

way calls for direct contact between buyer and seller, collapsing space and time while cutting costs. "The Internet is not only creating a new industry in itself but changing the competitive landscape of every industry in the world," says Benjamin M. Rosen, the chairman of Compaq Computer Corp.

So who made BUSINESS WEEK's e.biz elite? Some of our picks are already bona fide captains of industry—like Yahoo! Chief Executive Timothy Koogle, financier Masayoshi Son of Softbank Corp., and e-commerce king Jeffrey P. Bezos of Amazon.com Inc. Others are as-yet unproven Netrepreneurs who made the list because of the radical trails that they're blazing—like Webvan Group Inc.'s Louis H. Borders, of Borders bookstore fame, who is turning his mathematical prowess on a huge Web conundrum: How to deliver perishable foods to cybershoppers everywhere.

DAREDEVILS. And then there are the best-kept secrets: Goldman Sachs & Co. tech IPO quarterback Lawton W. Fitt, for example, who laid the groundwork for the launch of 22 highfliers this year. Ever heard of Glen T. Meakem? You will. The founder of FreeMarkets Inc. is challenging fixed pricing by making it possible for all manner of businesses—even coal mines—to use the Web for their auctions of products and services.

It was no cinch to pick the 25 ultimate Netheads. We brainstormed and amassed a master list of more than 100 names. Then, over the course of three weeks and with much, er, spirited debate, the best of those rose to the top as the standouts we believe are most profoundly influencing the Internet today. They're the empire builders, the innovators, the bankrollers, the architects, the visionaries, and the pacesetters—daredevils who gladly risk all and leap the chasm between what they know and what they believe.

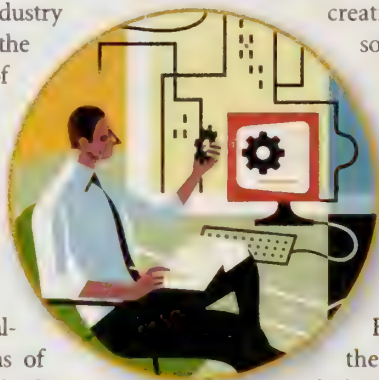
Here's a sign of how much things have changed. The daredevil of the PC generation is not on our list: William H. Gates III. It wasn't so long ago that the honcho of Microsoft Corp. seemed to have the computer industry in a brainlock. But now we're seeing the wholesale redistrib-

ution of leadership in the technology industry. Like the Web itself, the Internet industry has no center of gravity. It's creative chaos incarnate. Now, someone at Noname.com is just as likely to create the next great business as is someone at Microsoft. "The beauty of the Web is that it's open to everybody," says Scott G. McNealy, CEO of Sun Microsystems Inc. Everybody gets to stand on the shoulders of everybody else's work. That's why everything's accelerating."

Eventually, things will slow down. Power will coalesce, too. But don't expect the Internet to mimic the PC industry, with only a

duo of dominant players. That's how the Net's technology underpinnings are owned by one company—the way Microsoft owns Windows on PCs. Ron Chernow, author of *Titan: The Life of John D. Rockefeller Sr.*, doubts that anybody will be able to control the Internet the way Rockefeller controlled oil. "It's a very greasy pot," says. "It's very difficult to maintain a dominant hold because of the speed of change and the competition that can emerge in unexpected areas."

The members of our e.biz 25 don't have their successes for granted. Even Microsoft doesn't rule out the possibility that the seemingly unbeatable company might end up being just a "footnote" in e-commerce history. Or not. The fact that he's so confident could assure that he will make it for years to come. ●



THE LIST

[empire builders]

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AMAZON.COM INC.

26 **Stephen M. Case**
AMERICA ONLINE INC.

26 **Timothy A. Koogle**
YAHOO! INC.

[the innovators]

28 **Louis H. Borders**
WEBVAN GROUP INC.

30 **Jay S. Walker**
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52 **John T. Chambers**
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52 **Michael S. Dell**
DELL COMPUTER CORP.

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E-commerce



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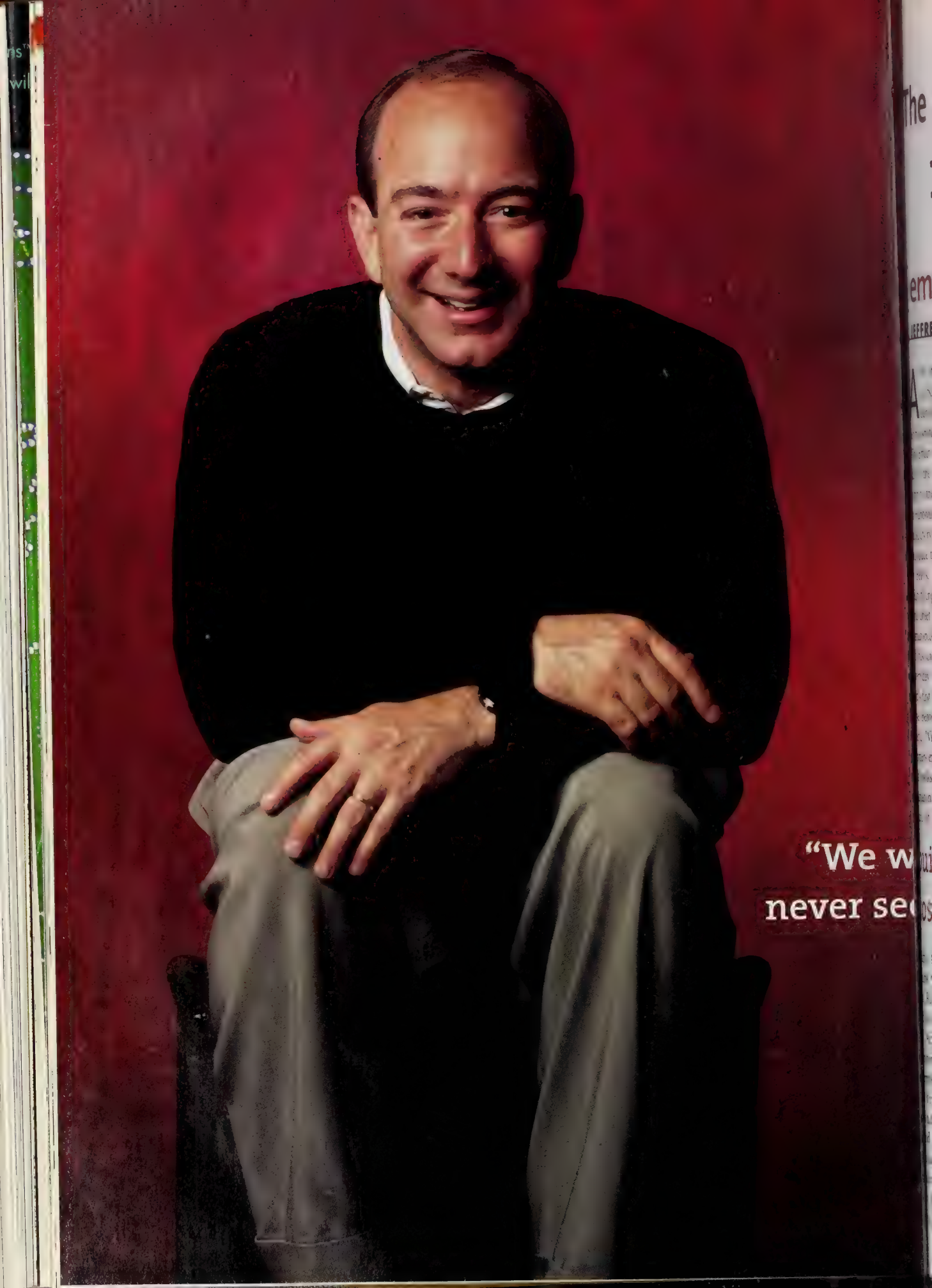
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The Most Influential People in Electronic Business

empire builders]

JEFFREY P. BEZOS

A lot of kids in the 1960s wanted to be astronauts, but few as ardently as Jeffrey P. Bezos. A paper he wrote for a NASA student program, "The Effect of Zero Gravity on the Aging of the Common Housefly," won him a trip to the Marshall Space Flight Center in Huntsville, Ala. And in his high school valedictory speech, he called for colonizing space to ensure humanity's future. Bezos, now 35, never realized those day-dreaming dreams. But as the founder and chief executive of online superstore Amazon.com Inc., he's on a rocket ride of his own—one certain to transform everyday life far more than Alan Shepard's first flight in space. More than anyone else, Bezos made the Internet safe for shopping. With more than 10 million customers expected to buy about \$1.4 billion worth of books, CDs, toys, and more this year at Amazon, Bezos is poised to define the future of consumer commerce. Says Paul

Wal-Mart of the Web will prove too limited. Says Bezos: "We want to build something the world has never seen."

His secret so far? When Bezos started Amazon in his suburban Seattle garage in 1994, he quickly realized the buyer is king on the Web—and set out to build the most customer-centered store anywhere. Rejecting the notion that Web surfers are fickle, he views customers as his most enduring asset—the one thing that makes Amazon's stock worth \$22 billion. "The Internet is this big, huge hurricane," he says. "The only constant in that storm is the customers."

More than any rival before or since, Bezos has focused everything at Amazon's Web site on making it easy for visitors to

senior vice-president at New York investment bank D.E. Shaw & Co., the Princeton University electrical-engineering and computer-science grad was a quick study—always jumping into new businesses.

He's still pushing into new frontiers. Putting off profits to get big fast, he's outfitting warehouses to offer better selection and faster service than rivals. Adding auctions last March, he moved Amazon into the huge market for commerce between individuals. And with a raft of tech acquisitions in the past year, he aims to help consumers find any-

thing, whether at Amazon or other sites. His strategy: to gather so much data on customers that he can target each one with unique, irresistible offers. By building an "information empire," says Forrester Research Inc. analyst Evie Black Dykema, "they're absolutely surrounding the customer."

Bezos' boundless ambition could prove risky. "You can get too big to reach the outer limits of your empire," says Kenneth Orton, chief strategist for e-Business at San Francisco consultant Cognitavive Inc. "Rome did." But rivals hold out no such hopes. Sighs Darryl Peck, CEO of computer retailer Cyberian Outpost: "Amazon is probably a threat to anything they decide to get into." If Bezos gets his way, Amazon will end up being in just about everything.

—By Robert D. Hof

JEFFREY P. BEZOS

AMAZON.COM INC.

Position: CEO

Contribution: Showed the world how to deliver "analytical" customer service on an e-commerce Web site.

Ambition: To create the online place where people can find anything they want to buy—not just books and music CDs.

Would something the world has seen says of his online empire

Wells, futurist at the Menlo Park (Calif.) Risk Tank Institute for the Future: "He's like Richard Sears or the F.W. Woolworth of his age."

Actually, Bezos aims to build an online empire much broader than any earthly enterprise. With a brand already recognized by 8 million U.S. adults, Bezos wants Amazon.com to be the place for consumers to find almost anything they want—whether Amazon itself sells the products or simply takes a cut from other merchants selling on its Web site. If he's successful, the conventional description of Amazon as the

find what they want, discover what they didn't know they wanted, and buy it fast—with just one mouse click. He was among the first to encourage visitor participation, even running negative book reviews. And he pioneered new technologies, such as collaborative filtering, which suggests products each individual buyer might like. The result: Nearly 70% of Amazon's sales are from repeat customers.

INFORMATION EMPIRE. Before Amazon, Bezos showed little sign of becoming a titan of business—besides scary smarts, unbounded energy, and the world's loudest laugh. As a

ONLINE LINK

A Q&A with Jeff Bezos is available at ebiz.businessweek.com.

STEPHEN M. CASE

Stephen M. Case is to the Internet what RCA's David Sarnoff was to television. More than any other leader in e-business, the 41-year-old chairman of America Online Inc. is responsible for bringing the Internet revolution to the masses. By making online access convenient and entertain-

It also has teamed up with satellite broadcaster DirectTV to bring AOL to television—still the most popular appliance in the house.

Long-term, Case expects his biggest rivals will be goliaths Microsoft Corp. and AT&T. But by blanketing the landscape—to extend people's everyday lives online—Case thinks AOL could vie with them in the 21st century. "We have a shot at being the most val-

ued and respected company in the world. If we play it right," he says. So far, he's playing it impeccably.

—By Catherine

STEPHEN M. CASE**AMERICA ONLINE INC.**

Position: Chairman and CEO

Contribution: Attracted 20 million customers by making logging onto the Internet easy and fun. Everybody else is playing catch-up.

Ambition: To make AOL the gateway to e-commerce and one of the world's most valuable companies.



ing, AOL has attracted 20 million subscribers, making it by far the world's largest Internet access provider.

For Case, this is just the beginning. With this potent new medium, he wants to transform the lives of tens of millions of people worldwide—and build a vast cyber empire in the process. Case predicts people everywhere will use their online connections daily to communicate, work, shop, and entertain themselves. "Instead of viewing the PC as a productivity machine, we've turned it into a communication device," says Case. "It's about... building a sense of community and engaging people."

His goal, which he dubs the AOL Anywhere strategy, is to make sure that no matter what device or type of service consumers may favor, AOL will remain a trusted, easy-to-use gateway to the Web. The company is working to provide service on the popular handheld Palm computer.

TIMOTHY A. KOOGLE

Timothy A. Koogle never quite took to the trappings bestowed on senior executives in Corporate America. Even after nine years in various top jobs at Motorola Inc., which entitled Koogle to a swank marble-floored office in a sky-high tower, he felt out of place. "I never could stand it," says the 48-year-old Virginia native.

No surprise, then, that Koogle traded in his buttoned-down surroundings for the stripped-down world of Yahoo! Inc. in Silicon Valley. But what was stunning was how thoroughly Koogle transformed not just Yahoo but the world of consumer Web sites. Koogle's Yahoo pioneered the concept of the Web "portal," the notion that businesses could create powerful gateways to the Net for millions of people—much like the influence of the early TV networks. Today, Yahoo's vast network, which includes everything from e-mail to news to auctions, attracts some 80 million people

worldwide every month. Its market value is \$42 billion, more than CBS Inc. Now everybody's trying to out-Yahoo Yahoo.

They'll have to hurry. Koogle is upping the ante by pushing hard on e-commerce. He's figuring out ways to drive transactions by hosting stores on Yahoo's site, and getting likely buyers via e-mail. And adding snazzy video. This is all part of Koogle's ultimate dream: "A goal is to be the largest media company in the world," says Koogle. But even then his office is unlikely to ever have marble floors.

—By Linda Hime

TIMOTHY A. KOOGLE**YAHOO! INC.**

Position: Chairman and CEO

Contribution: Transformed a directory of cool Web sites into an Internet portal, including everything from weather reports to shopping to games.

Ambition: To create one of the world's largest media companies.



Is your e-business built on a house of cards?



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[innovators]

LOUIS H. BORDERS

Louis H. Borders may be the newest—and perhaps unlikeliest—member of the Internet brat pack. After all, the 51-year-old entrepreneur is known as the man behind bookseller Borders Group Inc., the second-largest bookstore chain in the U.S. What does he know about doing business in cyberspace?

Turns out he's got an idea compelling enough to lure more than \$120 million from hallmark investors such as CBS, Yahoo!, LVMH, Softbank, and venerable venture-capital firms Sequoia Capital and Benchmark Capital. And soon public investors will be able to get a piece of the action when Borders' latest venture, Webvan Group Inc., launches an initial public offering. They will all be banking on the same thing: That Webvan is going to be one of the biggest ideas to hit the Net.

It's not just that Webvan, which delivers groceries ordered from its Web site to customers' homes, is going after a piece of the \$720 billion grocery market. Or that the Foster City (Calif.) company hopes to offer nearly double the selection of products of a typical grocery store—at comparable prices. It's more because Borders looks to have invented a novel way to make a buck on an industry that has, so far, largely stumped the online crowd. In 1998, fewer than 1% of all groceries were sold online, according to Forrester Research Inc. That's despite formidable efforts from the likes of Peapod Inc. and HomeGrocer.com Inc.

the last two years, Borders has devised more efficient ways to assemble customer orders, store them while in transit, and deliver them to homes within the 30-minute window customers select. "Intuitively, I knew I'd have a great financial model if I could eliminate store costs," Borders said in a May interview before entering the quiet period required by the company's planned IPO.

That's not all that has been eliminated. Borders also got rid of the need for most stock clerks and multiple warehouses. In their place will be giant distribution centers that Borders designed to service major met-

LOUIS H. BORDERS

WEBVAN GROUP INC.

Position: Founder and CEO

Contribution: Making home delivery of perishable goods possible at grocery store prices.

Ambition: To fulfill virtually every local delivery need—from groceries to dry cleaning to video rentals

ropolitan areas around the globe. Borders maintains that each of its facilities, which at peak will be run by some 700 employees, can handle the equivalent of 25 traditional grocery stores. "Louis is a genius at applying technology to business," says Benchmark partner David Beirne, who also serves on Webvan's board.

The first facility, a 330,000-square-foot center in Oakland, Calif., that opened in June, includes 4½ miles of conveyor belts

"Webvan is giving customers back their time so they can relax at home like Ozzie and Harriet,"

some of and hang out says Borders

But those upstarts haven't taken the tack that Louis Borders has. The mathematics wizard—he has a math degree from the University of Michigan and did graduate work in the subject at Massachusetts Institute of Technology—has used his analytical knowhow to reinvent much of the back end of the grocery business. Spending many a night with his old math textbooks over

as well as temperature-sensitive rooms to house items such as wine, cigars, and fish. The idea is to make it possible for workers to assemble customer orders quickly. Instead of traipsing down numerous aisles to find specific items, selected products are brought to workers on the belts or on rotating carousels. Borders actually mocked up various scenarios of his scheme in a



What's at stake? A healthy slice of the \$720 billion grocery biz

warehouse before deciding on the optimal number of items to put on carousels and how far apart they should be to minimize the amount of walking a worker would have to do.

The result, says Webvan, is a one-of-a-kind system that allows so-called pickers to compile an average 25-item order—out of an eventual 50,000 available products—in less than an hour. The expected result of all this increased efficiency and logistics magic: an increase of more than 10 percentage points in the grocery industry's traditionally low 6% operating margins.

Borders says his Web dream has a sort of “back to the future” quality. His company is harkening to such warm and fuzzy traditions as the milkman, providing reliable,

personal service to customers' homes. At the same time, Webvan uses high-tech innovations to offer more than yesterday's home delivery businesses ever could. Down the road, he hopes Webvan will expand beyond groceries and provide door-to-door service for such routine chores as dry cleaning and film development. “Webvan is giving customers back some of their time so that they can relax and hang out at home like Ozzie and Harriet,” Borders says.

Although Webvan is still unproven, supporters say if anyone can pull off its ambitious plan, it's Borders. An intense, soft-spoken man, he brings a wealth of experience from his days with the bookstore chain. Back then he devised an inventory tracking system that is now widely used throughout the book industry. And friends say his knack for business and sheer brainpower make up for his uneasiness amid the often wacky Internet crowd. A few billion in market value won't hurt, either.

—By Linda Himmelstein

ONLINE LINK

Delve deep into Webvan's strategy in a Q&A with Louis H. Borders at ebiz.businessweek.com.

JAY S. WALKER

For a glimpse inside Jay S. Walker's universe, walk into his Stamford (Conn.) office. It looks like a rich man's playpen: On the wall are Nixon's letter of resignation to Henry Kissinger and four flags that went to the moon, along with man-size models of *Star Wars*' Yoda and Boba Fett characters. Diapers, detergent, and tins of tuna crowd the shelves—pointing to a future foray for priceline.com, the Web site that sells air tickets, cars, hotel rooms, and loans. What else does a billionaire want? Escape from earth, of course. "Space is one of the great frontiers," says Walker, 43, echoing *Star Trek* actor and now priceline.com spokesman William Shatner. "I'd love to go on a shuttle to the moon."

For the right price, maybe he will. Since priceline.com made its debut 17 months ago, Walker's name-your-own-price system has turned commercial logic on its head. It proves that, for the right savings, people will buy something without knowing the brand or, in the case of airline tickets, without knowing when their flight takes off. In Walker's world, the buyer writes the price tag. There's a competing group of sellers, whose prices are matched against it by priceline.com.

ME-TOO SITES. At first, there weren't enough matchups—so priceline.com sometimes discounted prices below costs to make deals happen. But ultimately, Walker persuaded more than 2 million people to sign up for goods over the Web. In the process, he's forcing traditional businesses to rethink their pricing model and spawning imitators, including buyingedge.com and NexTag.com.

Now, Walker is extending the approach to fresh fields. Although he won't disclose the next items up for bid—simply smiling at the household products perched on his shelves—Walker sees no

JAY S. WALKER

PRICELINE.COM

Position: Founder and vice-chairman

Contribution: Shook up the world of online sales by letting consumers name the price they'll pay for airplane tickets, hotel rooms, and cars.

Ambition: Extend the priceline.com approach to a universe of consumer products.



end to his potential offerings. "Even in lifesaving medicines, people will be flexible to save money," he says.

How far he can stretch the concept is unclear, but priceline.com is off to a rousing start. In one year of business, revenues shot to \$111.6 million in the quarter ended June 30, up from \$49.4 million for the previous three months. That still meant an operating loss of \$16.2 million, but the losses have shrunk from \$17.6 million and \$73.9 million in the prior two quarters, and analysts see profits by the middle of next year. Walker's winning

ways look sustainable: He has received two patents at priceline.com and has applications in on 20 more. "This is a unique platform that can be translated across product lines," says analyst B. Alexander of Wit Capital Corp.

Walker wants to repeat his formula dozens of markets. "What many people who are affluent fail to appreciate is most of the world is on a budget," Walker. And where does this bargaining billionaire expect his business to go? Straight to the moon.

—By Diane



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MARGARET C. WHITMAN

EBay Inc. founder Pierre Omidyar was the genius who thought of putting auctions online. But it took the man-

agement savvy of CEO Margaret C. Whitman to turn his quirky idea into an Internet giant capable of handling millions of buyers and sellers—not to mention ferocious competition from the likes of Amazon.com Inc.

In just 16 months, eBay has grown from 750,000 customers to 5.6 mil-

MARGARET C. WHITMAN**EBAY INC.**

Position: President and CEO

Contribution: She put eBay—and Web auctions—on the map by piloting eBay's successful IPO last September. It has racked up a whopping 5.6 million users.

Ambitions: To make eBay an international phenom where all sorts of things are auctioned—including big-ticket items such as collectible autos.

lion. More than that, Whitman has helped legitimize the notion of negotiated pricing—making it one of the most powerful economic forces

on the Internet. The concept is being applied by others to every kind of good, from airplane tickets to industrial goods.

Now, Whitman is busy adding big items such as antique cars to eBay's traditional fare of Beanie Babies and bras. She just launched international sites in Britain and Germany—and expects to enter five other countries by early next year. Next, she plans on setting up regional offices in 50 U.S. metropolitan areas so she can sell large items that can't easily be shipped.

Through it all, Whitman vows to keep the close site of the fans that made eBay a star hit. "One of the things I'm most proud of is managing something that's grown from a small town to a larger community," says Whitman. One initiative: Voice of the Customer Day. Each month, eBay invites 10 to 20 customers into its offices, where they spend 5 to 10 hours a day of their time with new employees. And so far, Whitman. Now if she can just get the word out that there are such eBay fanatics, the company could start to look like eWorld.

—By Heather

GLEN MEAKEM

Glen Meakem may look as buttoned-down as a Young Republican, but don't let his carefully combed coif and pressed khakis fool you. This guy lives close to the edge. Consider that Meakem, a U.S. Army Reserve engineer, asked to be sent to the Persian Gulf war: Saddam Hussein's 1990 invasion of Kuwait "kind of pissed me off," he growls.

Risk turns Meakem on. That's why he left a solid job at GE Information Services in 1995 to start his own company, FreeMarkets Inc. in Pittsburgh. It's a Web-based exchange that allows businesses, ranging from utilities to farm equipment makers, to post a list of products they want to buy, while suppliers compete for the business. If Meakem's concept takes root, it could revolutionize business-to-business commerce. "They're using the Internet to threaten traditional pricing," says John J. Sviokla, a Net strategist at Diamond Technology Partners Inc. in Chicago. "That's a big deal."

Meakem's selling proposition is alluring. FreeMarkets will raise the quality of the prod-

ucts and services you buy by lowering the price you pay for them by 15% to 20%. Customers are starting to go for the pitch. Last year, FreeMarkets ran auction-

GLEN MEAKEM**FREEMARKETS INC.**

Position: Co-founder and CEO

Contribution: Revolutionizing business-to-business commerce by creating Web auctions for industries as diverse as coal mining and auto manufacturing.

Ambition: To break down barriers to entry and build frictionless markets.

ering \$1 billion worth of purchases and generating \$7.8 million in revenues for itself. "The money we save money is that we're increasing competition where there wasn't any before," says Meakem. "We're minting our buyers money." But there's a risky proposition.

—By Roger O. Co

Question:
What did the e-tailer
say to the retailer?

Answer:
My floor space is
bigger than yours.

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Using a state-of-the-art technical solution, we're helping Tower Records individualize their customer's buying experience. Experience it at towerrecords.com. We're getting a good thing even better.

Furniture.com

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Furniture.com

Helped Furniture.com build the world's largest online furniture store, with over 50,000 items from over 100 manufacturers. Shoppers easily browse the vast selection, create their own virtual room, and work with design consultants for personal service.

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Transforming business in
the digital economy.

JAMES H. CLARK

When James Clark's new \$30 million high-tech sailboat, Hyperion, was formally handed over to him at a Netherlands shipyard in January, the co-founder of Internet pioneer Netscape Communications Corp. envisioned a leisurely life on what he called a "luxury floating RV." Well, you can stuff that dream in a bottle and toss it out to sea. Instead, the serial entrepreneur is spending virtually 100% of his waking hours as CEO of yet another startup, myCFO Inc., a personal money-management service.

There's just too much happening on the Internet for Clark to take a vacation. But he has only himself to blame. Five years ago, after leaving the first company he started, 3-D

pioneer Silicon Graphics Inc., he and programming whiz Marc Andreessen launched the Net revolution with their Netscape Navigator browser. It was that small, simple program that brought the power of the Net to regular folks.

And Clark hasn't stopped there. He turned his attention to developing services that take

advantage of the Net. First, he co-founded Healtheon Corp., a high-profile Web service for managing health care. And now he is focusing on personal finance, says

JAMES H. CLARK

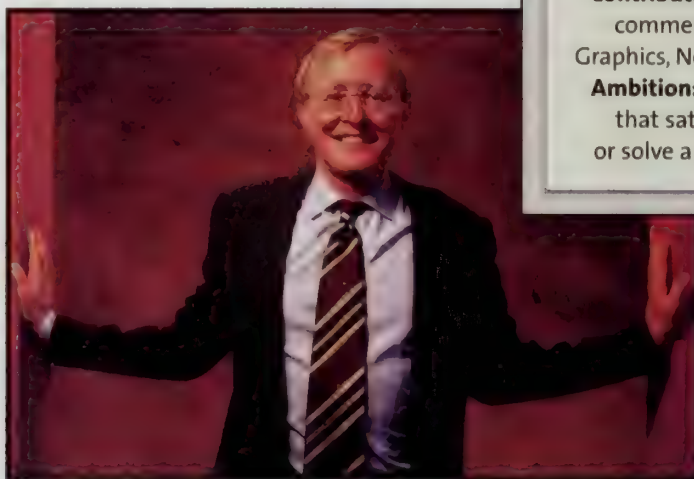
MYCFO INC.

Position: Founder and CEO

Contribution: Arguably the father of the commercial Internet. Started Silicon

Graphics, Netscape, Healtheon, and myCFO

Ambition: To keep launching companies that satisfy his intellectual curiosity or solve a problem he knows personally.



fat target. "I like to look at big markets and see if I can carve out a thick slice," says Clark, 55, who estimates his net worth at up to \$1.8 billion. If the Net doesn't let up, he may never go back to his luxury floating RV.

—By Steve

CHRISTOS M. COTSAKOS

E*Trade Group Inc. is only the second-largest Web trading company. But you wouldn't know it from the stir whipped up by its hyperactive CEO, Christos M. Cotsakos. His in-your-face, "Boot your broker" ads made online trading seem ultrahip after Cotsakos arrived in 1996. That was the wake-up call that sent traditional Wall Street firms tearing up old business plans and reaching for the Tums. He's not letting up, either: E*Trade recently began offering after-hours trading and lowered prices for active traders. And now, it's spending \$150 million on a new round of ads.

That's just a hint of Cotsakos' blinding ambition. Now, he plans to build an online financial-services empire to rival anything on the Street. Brokerage offerings formed the first building block—letting consumers buy stocks for as little as \$4.95 a trade. He's adding online banking and loans and, through partners, insurance, mortgages, and even the ability to buy IPO stocks. For managing all aspects of individual investors' money, "we'll be the one place you book-

mark" on your browser, vows Cotsakos.

E*Trade can't depend on day traders to pump up its businesses. That's why Cotsakos, 51, is trying to attract the mass of consumers who can't quite bring themselves to use a mouse to buy stocks. That hurdle is "all about clickophobia," says Cotsakos. "If only we could get

E*Trade has a new series of ads to soothe nerves. If he can get the message through, he'll be on his way to building a powerhouse that will have Wall Streeters looking at Pepto-Bismol as a chaser for those Tums.

—By Lou

CHRISTOS M. COTSAKOS

E*TRADE GROUP INC.

Position: Chairman, CEO

Contribution: Made Internet trading hip with outrageous ads and got the attention of Wall Street's giants—forcing them to concoct their own Web schemes.

Ambition: To build a financial powerhouse on the Net to match the breadth and influence of mighty Citigroup's brick-and-mortar operations.

people to understand that all the databases of the world won't crash and that your information won't be lost when you send through a trade." To combat such fears,



e-centives [i-'sen-tivs] n. Personalized online coupons and special offers from your favorite brands—ready to redeem when you're ready to shop.



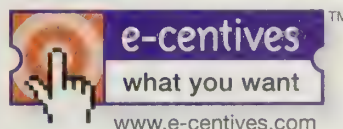
Give the people what they want

► **No two consumers are looking for exactly the same thing**, but some of today's smartest companies are using the Internet to give them exactly what they want—with e-centives™.

e-centives enable marketers to acquire new customers and build brand loyalty by dynamically delivering personalized incentives to consumers online based on their unique shopping profiles and interests. Marketers are able to promote relevant offers while consumer profiles are safeguarded for privacy. Marketers can easily launch and manage promotions in real time, dynamically delivering

e-centives both on and beyond their sites through an integrated network of online partners. And with e-centives' online organizer, offers are ready to redeem when consumers are ready to shop!

e-centives' unparalleled technology provides a seamless user experience designed to motivate consumers through the purchase cycle. To realize the promise of true 'one-to-one' marketing, give them what they want—e-centives.



personalized
private
✓
permission based
convenient

[bankrollers]

• MASAYOSHI SON

He's admired, envied, and even feared by some. But there's no denying that Masayoshi Son is single-handedly dragging Japan into the Information Age. Once scorned by the Establishment, Son now regularly gets face time with Prime Minister Keizo Obuchi. And there isn't an executive in Japanese finance, retailing, or high tech who isn't in awe of the clout Son now has over Japan's emerging Internet economy.

Small wonder. Since 1995, Son's Softbank Corp. has made perhaps the savviest venture-capital bets of all time by taking equity stakes in what are now the hottest sites on the Web. Think about Yahoo! Inc., GeoCities, E*Trade, or E-Loan. Son owns a piece of all them. He has parlayed startup

create a U.S.-style Nasdaq over-the-counter market next year for high-tech startups that bypasses Japan's restrictive small-cap market. He also plans to offer the service free to Japanese schools for a decade to kick-start interest in the Net and get Japan's personal-computer penetration to U.S. levels.

That has endeared him to officialdom. The government is counting on e-commerce and business-to-business transactions to lower Japan's bloated price structure and spur a productivity surge, as they have in the United States.

WITH A SHRUG. Yet others worry that a country that has always wanted its own Bill Gates should be careful what it wishes for. Son and his alliance directly or indirectly control 70% of listed Internet companies in Japan. And if Softbank controls 60% of Nasdaq Japan as planned,

Son is binding his 100-plus confederation of companies into a cyber-conglomerate

investments of nearly \$2 billion into paper profits now worth \$15 billion. And his own net worth tops \$2 billion.

Had he stopped there, Son might just have been remembered as a shrewd Silicon Valley sugar daddy who struck it rich. But he has no intention of slowing down. In what might be the model for global expansion of e-commerce, Son is binding together his 100-plus confederation of companies into a cyber-conglomerate that will expand into Asia and Europe. At its core is his Softbank, a sprawling empire in Japan and in the U.S. that includes software, retailing, magazines, Web publishing, and computer trade-show properties, with a market cap of \$38 billion—exceeding that of Toshiba.

His first big target is Japan, which Son figures is "missing out on a dramatic world movement." Son already has set up joint ventures there with Yahoo and E*Trade. His basic strategy is to import U.S. Web sites into Japan, where there is precious little experience in commercializing the Internet.

He's also smashing through some barriers that have held Japan back. The irrepressible dealmaker has clinched a deal to

would Son's friends get preferential treatment? "It will be like having your cake and eating it too," worries Joichi Ito, chairman of competitor portal Infoseek Japan. Others worry that Son is selling out Japan and letting U.S. companies into the most lucrative niches of the Net in Japan.

Son shrugs off the criticism. He vows his Nasdaq will treat all comers fairly. And he says his co-ventures with U.S. companies are good for the Japanese consumer. "I keep hearing about Son bringing in the black ships," he says, alluding to U.S. gunboats that forced Japan to open up during the Meiji era.

In a way, Son himself is the alien invader—but it's a positive thing. By dint of his drive and vast wealth he's proving something of an inspiration to Japan's home-grown Netrepreneurs. The irony is rich. Son is an ethnic Korean who suffered ridicule and once had to beg for startup financing from Tokyo lenders. Now, this cybermogul may be Japan's best hope to make a necessary and speedy transition into the Internet Era.

—By Brian Bremner

MASAYOSHI SON

SOFTBANK CORP., JAPAN

Position: Founder and CEO

Contribution: With \$2 billion invested, one of the biggest backers of Internet startups worldwide.

Ambitions: To pull Japan out of the Web dark ages and dominate e-commerce in Asia.



ROBERT C. KAGLE

Robert C. Kagle has come a long way from his days growing up in the Rust Belt burg of Flint, Mich. The oldest child in a single-parent family, Kagle was always looking to make a quick buck. For a time, he pushed an ice cream cart around his neighborhood. He took a job in the spark-plug division of General Motors Corp. He even did a stint at a tuxedo shop just so he would have a tux to wear to his high school prom—complete with top hat and cane.

Today, Kagle, 43, can afford to buy a chain of tuxedo stores—and then some. Thanks to his skill at spotting future Internet headliners such as auction pioneer eBay Inc. and online-mortgage upstart E-loan Inc., the partner at venture-capital firm Benchmark Capital has emerged as one of the industry's elite investors. And, with Kagle as its spiritual leader, four-year-old Benchmark has become one of the hottest venture-capital firms in Silicon Valley.

eBay was Kagle's first home run. Benchmark's \$5 million is now worth some \$3.2 billion. And Kagle's personal take: A cool \$170 million. Another Kagle winner is business-to-business upstart

Ariba Inc., a \$4 million investment now worth almost \$1 billion.

Kagle believes tomorrow's online sensations will have chucked traditional marketing by demographics in favor of targeting

individuals based on their up-to-the-minute purchasing habits. "What's more valuable to know: that someone is a 35-to-45-year-old male who drives a Cadillac or that someone recently bought golf clubs and

going on a vacation?" Kagle asks. The answer to that question is obvious. But it's just another matter to pick companies that can do it. Naturally for Benchmark, Kagle finds sharp entrepreneurs as readily as an ice cream vendor. "A jockey attracts kids on a summer afternoon."

—By Linda Hirshman

ROBERT C. KAGLE**BENCHMARK CAPITAL**

Position: General Partner

Contribution: Used his consumer marketing expertise to help launch such Internet darlings as eBay, E-Loan, and Ariba.

Ambition: To make Benchmark as dominant in venture capital as McKinsey is in management consulting.

LAWTON W. FITT

Chief executives tend to get the credit when startups go public and the stock blasts through the ozone layer. But they owe a huge debt to those who work behind the scenes on Wall Street. Nobody deserves more accolades than Lawton W. Fitt, managing director of Goldman, Sachs & Co., who quarterbacked more tech IPOs than anybody else. This year alone, she has greased the skids for more than 22 tech IPOs, including E-Toys and Juniper Networks, raising more than \$2.7 billion. That made Goldman the tech-IPO champ.

Silicon Valley execs say Fitt keeps a lid on IPO prices, and Fitt, 46, agrees that pricing is her most difficult task. "My job is to find the point of balance between the issuers and investors where

**LAWTON W. FITT****GOLDMAN, SACHS & CO.**

Position: Managing director

Contribution: Has quarterbacked dozens of Internet IPOs, including those of Yahoo! and eBay.

Ambition: To find the magic price point that satisfies IPO stock issuers and investors equally.

everybody feels the price is fair," Fitt says. "I want them to be equally happy or equally unhappy." Right now, in spite of a high-tech IPO slowdown, there are a lot of happy capitalists and not many com-

plaints. Fitt expects action to pick up again soon—though not the speculative fun of early this year. "There's not a bubble," she says. "Five years from now, there won't be Internet companies because everybody will be doing business over the Internet much the better for Goldman Sachs."

—By Steve Hirschman



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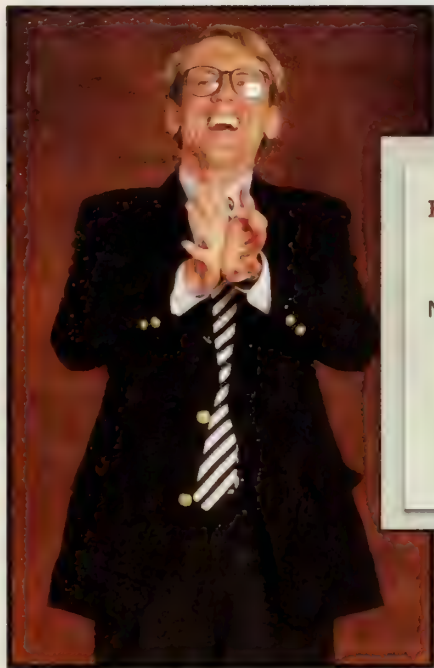
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L. JOHN DOERR

Venture capitalist L. John Doerr is a one-man Internet hit parade. Netscape, Amazon.com, Healtheon,

**L. JOHN DOERR****KLEINER PERKINS CAUFIELD & BYERS**

Position: General Partner

Contribution: Backed blockbuster Net pioneers like Netscape, Amazon.com, and Excite. Knits startups together with the famed Kleiner *keiretsu*.

Ambition: Leverage the *keiretsu* to create whole new industries on the Web—including health care.

drugstore.com, @Home, Excite—each received initial funding and early nurturing from Doerr. Sure, the Kleiner Perkins Caufield & Byers partner has had his losers in the past. Remember pen computing? Nevertheless, ever since he took a chance on Netscape Communications Corp., Doerr has wielded the Midas touch. “John Doerr is not only the best venture

capitalist in the world, but he is also one of the top business leaders,” says Cisco Systems CEO John T. Chambers.

Doerr is also a master matchmaker.

Who would have thought a bookie had anything to teach a drugstore? when drugstore.com’s fledgling needed some lessons in online retail. Doerr arranged to have them mentored by a really big brother in the Kleiner *keiretsu*—Amazon.com Inc. And when the @Home, the cable Internet access company, needed content as well as bandwidth, Doerr engineered its merger with Internet portal Excite.

Where is Doerr applying his art next? His latest ideas whirl around handheld computers. Five years from now, he says, people will tap the Internet far more frequently from palmtop devices than from desktop computers. By investing in Handspring Inc., a startup handheld computer maker, Doerr believes he once again positioned Kleiner Perkins at the forefront of a revolution. “Much sooner than a personal computer on every kid’s desk, we’ll have a handheld on every kid’s pocket,” he says. If that comes to pass, once again, Doerr will be the man who has beaten the venture-capital pick to the Next Big Thing.

—By Janet Rae-Du

BERNARD ARNAULT

When the French corporate raider Bernard Arnault lost a bitter fight to acquire Gucci early this year, some people wondered whether he had any more tricks up his impeccably tailored sleeve. Indeed he did. Arnault, the chairman of LVMH Moët Hennessy Louis Vuitton, is becoming Europe’s largest cyberbusiness bankroller—seeding the Continent for the coming explosion of e-commerce.

With a plan to pump more than \$500 million into Internet ventures in Europe, Arnault is staking a large claim in a market that seems to be on the verge of taking off. “In the U.S., the Internet developed in several stages—first the technical stage, then the portals, and then e-commerce,” says Arnault. “In Europe, this is all going to happen at the same time.” If it turns out that way, European entrepreneurs will owe a debt of gratitude to Arnault. He has invested in about 30 startups, including

the auction site icollector.com and the online retailer boo.com. He’s also backing U.S. startups such as E-Loan Inc. to help them with their European expansions.

Arnault, 50, says the Web will never replace the sensory pleasure of shopping in one of his luxury boutiques. Still, he’s cover-

BERNARD ARNAULT**LVMH MOËT HENNESSY LOUIS VUITTON**

Position: Chairman

Contribution: Founder of Europ@web, and leading bankroller of European Web ventures—about 30 so far, either European startups or U.S. companies expanding there.

Ambition: To invest more than \$500 million in e-commerce startups over the next several years in areas such as financial services and retailing.

ing his bets. In October, LVMH’s Sephora cosmetics chain is opening an enormous store in New York’s Rockefeller Center. The same day, Arnault is launching a Web site for Sephora. With that brand of fancy footwork,



Arnault could in short order move from being a leading financier of e-commerce to becoming a leading practitioner of it.

—By Carol Mat

When the connection's good,
it shows.

Technology brings you closer to your
customers. But how do you make the
right connection? With our 85,000
knowledgeable people, we can help you
transition your business to an e-business
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visionaries

MARY G. MEEKER

Poor Mary Meeker. When she started covering technology companies as an analyst at Salomon Brothers Inc. in 1989, it looked as though she had come late doozy of a party. The PC revolution was under way, and it seemed that nothing would come along during her career could possibly be its match. Still, she learned the fine art of trend-spotting from one of the sharpest analysts in New York—just in case another technology revolution should happen to come along. Boy, was she ready when it did. Meeker, then at Morgan Stanley Dean Witter, only called the Internet early as a megabusiness opportunity, but, with her insightful commentaries and bold predictions, she ended just about everybody else see it, too. And a handful of colleagues penned the pieces of standout trend analysis—the Internet Report in 1995, followed by advertising and e-commerce studies in 1996 and 1997—that became virtual bibles for investors and CEOs alike. “She gets it, got it earlier than most, and was able to articulate it to the business community in a way they could understand,” says John Chambers, CEO of Cisco Systems Inc.

TY MARKET? Meeker is an unlikely seer. Born and raised in rural Indiana, she’s down-spoken and humble. But all that only masks her laser-sharp analytical skills. Her specialty: Making sense out of bedlam. Like on any day one of her early discoveries, Netscape Communications Corp., went public in 1995. “I will never forget that,” Meeker says. “We were on the trading floor when Netscape was trading at 72. Someone

goods. What they had, she understood, was millions of customers and brands that had a shot at shining around the world. After Netscape’s initial public offering, she helped create a new methodology for estimating companies’ value based on how much a Web site visitor or software user might be worth in the future and projecting revenues and profits based on that. Since then, hundreds of Internet companies have gone public—and nobody blinks when their stock prices soar.

Meeker isn’t all numbers and spreadsheets, though. She learned about the Net industry by talking to hundreds of entrepreneurs on frequent visits to Silicon Valley and San Francisco. She immersed herself

Stephen M. Case, whose service now has more than 20 million customers.

The trends Meeker is spotting now could very well become tomorrow’s gold standards. She believes there is plenty of room for good companies to build huge businesses that support rich market caps. She has high expectations for business-to-business markets that are revamping traditional commerce. Example: Chemdex, an online marketplace that brings together chemical buyers and sellers. Another hot space could be online music, where companies such as RealNetworks, MP3.com, Amazon.com, and AOL are making deep inroads.

Since 1995, Meeker’s job has shifted with

MARY G. MEEKER

MORGAN STANLEY DEAN WITTER

Position: Managing Director

Contribution: Kicked off the consumer e-commerce gold rush by predicting huge growth in Internet advertising and consumers’ readiness to open their wallets on the Web.

Ambitions: To spot the next Netscapes (the way she did the original one) and help investors avoid getting caught in the backdraft when the weaker Internet stocks melt down.

in Net culture—hanging out in the Valley with Netscape wunderkind Marc Andreessen. In 1995, she and Andreessen smugly estimated that only 400 people really “got the Net.” Meeker was one of them—and proved expert at pulling all that she had gleaned into one big picture.

Some of Meeker’s early revelations seem quaint or obvious now. But at the time, they were daring. In 1993, she backed America Online Inc., a fledgling service

the Net tides. Now, in addition to analyzing new companies and trends, she increasingly focuses on how established companies such as Yahoo, AOL, and Amazon will adjust and compete with one another. And she even gives counsel to some of the industry’s big shots. “She sees how large the opportunity is—and encourages us to think big,” says Amazon CEO Jeffrey Bezos.

Meeker also has become something of a Cassandra—warning that greed is encouraging investments that won’t ever pan out. “I think we have a vicious cycle, where the amount of money lost for a lot of new companies and a lot of old companies trying to get into this space is going to be HUGE—in all caps,” she says. That’s a scary warning, especially if you consider the forecasting record of the person it’s coming from.

—By Heather Green

of the first who “got the Net,” can explain it to Wall Street

ended to me and said ‘Isn’t this exciting?’ I just looked at him and almost started crying because now I had to deal with this.” The market seemed to have gone nuts. Meeker’s challenge was to explain it to Wall Street. She saw that new rules were required for evaluating Net startups. These companies didn’t have profits. In some cases, they didn’t even ask customers to pay for their

with just 300,000 subscribers that was viewed skeptically by many analysts. But she understood how AOL would gain tremendous power and value as more and more people signed on for news, e-mail, chat—and, ultimately, access to the Web. “She understands the economics of the medium and has an intuitive feel for the people and trends,” says AOL Chairman

ONLINE LINK

Check out a Q&A with Morgan Stanley’s ace Internet analyst, Mary Meeker at ebiz.businessweek.com.

JOHN HAGEL III

John Maynard Keynes didn't live on Internet time, but if he had, he probably would have been a fan of McKinsey & Co. strategy consultant John Hagel III. Practical, powerful men, Keynes wrote, are usually the unwitting slaves of some defunct intellectual scribbler. Hagel is a scribbler, but these days, because things move so fast, thinkers like him don't have to die before they get the credit due them.

Hagel is a fountain of concepts that are being put into practice all over the Web. In 1997, his book *Net Gain* (co-authored by Arthur G. Armstrong) suggested how non-commercial Web communities could use content, chat, and bulletin boards to promote e-commerce. Hagel's reputation stems

from what happened after *Net Gain* came out: a burst of new sites serving special interests from cooking to golf. "I think he's a combination of someone who can put a name on things that are already happening and an instigator," says Ron Martinez, CEO of Brodia Group, an e-commerce startup.

In 1999, Hagel was back with *Net Worth* (co-author, Marc Singer), arguing that a new way to make money online is to become an "infomediary." An infomediary would gather its customers' profiles and seek out special offers and discounts for

them from suppliers on the Net. He says an average consumer could save more than \$1,100 a year even after paying commission on purchases. The infomediary would use the rest of its money selling products to marketers, who would cough up because of the advantages of precise targeting.

What's next? *Net Net*. It's about how brick-and-mortar companies try to become infomediaries. Don't rush out to do it, though. *Net Net* will be finished "as soon as my wife lets me," says Hagel.

—By Timothy J. Mu

WILLIAM JOY

The technology world's going pretty much according to Bill—but not the Bill you think. While Microsoft Corp.'s William H. Gates III must worry about an antitrust suit and the threat of a post-PC era, the ideas of Bill Joy, Sun Microsystems Inc.'s chief technology officer, couldn't be more in vogue.

For 20 years, the bushy-haired Joy, 44, has been the Merlin of the computer industry—peering out 10 years and foreseeing a whole new way of computing. His vision: that computers need to be much simpler to use, and information should be readily available everywhere via the Net on a range of appliances. Now, thanks in good part to Joy's prodding and Sun's Java technology, that vision is becoming reality. Joy's ideas are laying the foundation for making e-business ubiquitous.

His latest musings are just as audacious. Joy foresees a world where tiny computers that are embedded in all sorts of devices talk directly to other computers, without need of human intervention. Why, for example, couldn't power plants negotiate with each other to adjust real-time to minimize pollution? "The big emerging trend is finding ways to get computers to reliably work together—and it's much harder to do than people think," says Joy. "It's going to take many years."

Joy seems likely to enjoy the long journey. He works with a team of four in Aspen, Colo., close to the ski slopes and far



WILLIAM JOY

SUN MICROSYSTEMS

Position: Co-founder and chief scientist

Contribution: Laid the foundation for the Web by putting Internet technology into the Unix operating system in the 1970s. Later molded Sun's hot Internet software, Java.

Ambition: Create technology that lets computers talk to each other—leaving humans to do much more interesting things.

from the daily grind at Sun's Silicon Valley headquarters. To peer into the future, Joy endlessly scours books on everything from economics to architecture, looking for hints on how the Net will develop. Joy has been studying groupthink in the colonies. "Bill's often so far outside the box that he's not aware there is a box," says Java creator James Gosling. Well, who knows? It has worked so far.

—By Peter Bu



JOHN HAGEL III

MCKINSEY & CO.

Position: Principal

Contribution: Wrote two books, *Net Worth* and *Net Gain*, that were early in pointing the way to Internet success.

Ambition: Publish the much-awaited *Net Net*, which tells established companies how to harness the Web and avoid being roadkill.

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LOUIS V. GERSTNER JR.

Years from now, if there is a version of the popular game Trivial Pursuit on the topic of the Internet, one question that would be certain to stump even the most diehard game enthusiasts is: What chief executive officer, criticized for his lack of strategic vision, actually demonstrated more savvy than many of the digerati by jumping on the Internet early and steering his troubled company to a stunning recovery? The answer: IBM Chief Executive Louis V. Gerstner Jr.

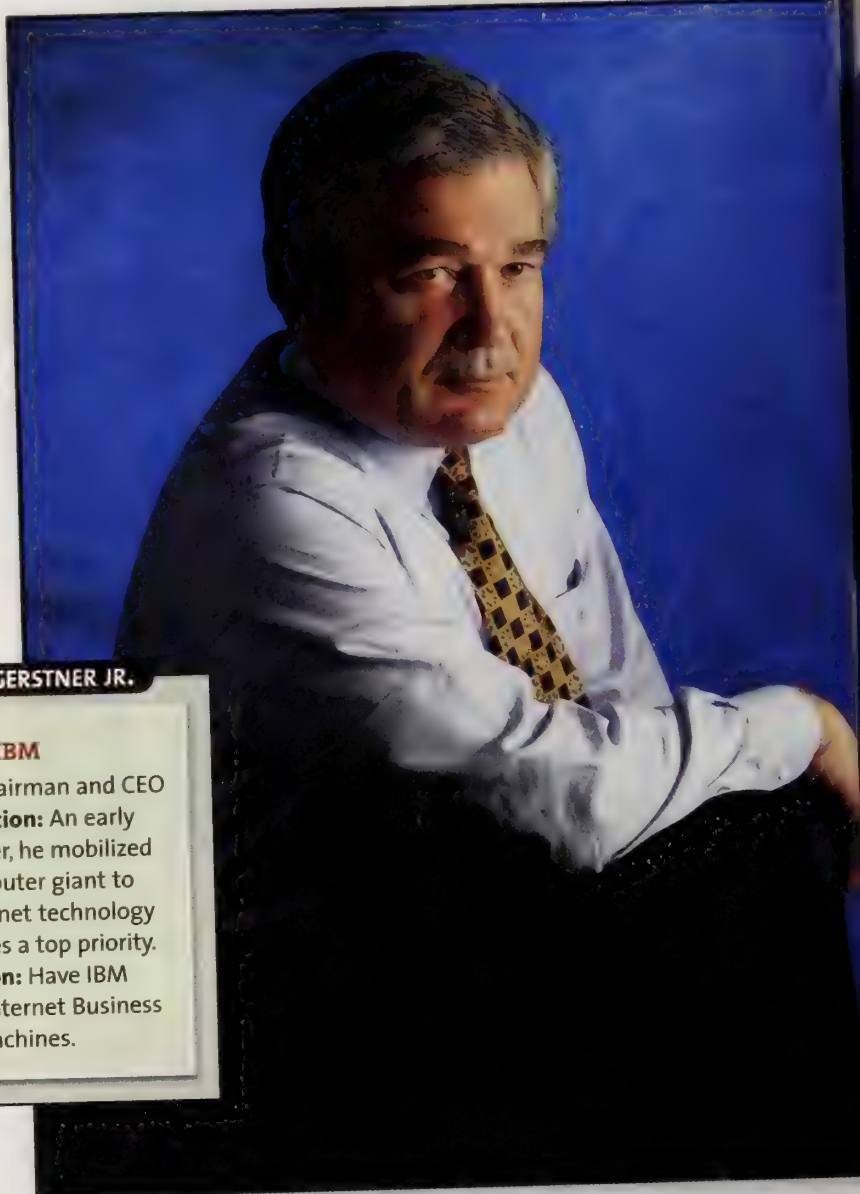
Dial back to 1995. The computer industry is in the midst of browser wars, talk of 500 television channels, and the notion that content would be king on the Internet. But there is Gerstner, the former McKinsey & Co. consultant who had pushed credit cards and cigarettes for most of his career, delivering a contrarian speech at the annual COMDEX computer industry trade show. His message: The Internet isn't just about browsing and selling to consumers. The killer application, Gerstner argues, will be business-to-business e-commerce. The Internet isn't about personal computers, either, he says. It's about big computer servers

capable of handling massive loads. Gerstner receives just a smattering of polite applause. "At that time, it was a pretty lonely position we took," he told Wall Street analysts in May. **SWEET SPOT.** Today, that position is packed as tightly as a Tokyo subway car at rush hour. And Gerstner's early moves have helped Big

Blue stand apart from the crowd. About 25%, or \$20 billion, of the company's revenue is driven by e-business. That includes products such as mainframes that serve as the heart of Charles Schwab's online trading business, or e-commerce software that conducts transactions for customers such as Macy's, Victoria's Secret, Lands' End, and CD Warehouse. "You're stupid if you're not looking at IBM," says Bill Bass, vice-president for e-commerce at Lands' End.

So where are the Internet opportunities for IBM now? They aren't among the dot.com startups—although IBM is trying to get its share of business there. Instead, Gerstner sees big money in his company's traditional customer base—the thousands of companies that have yet to tap the Internet and transform their businesses. "That's the real

computer industry—including so mogul William H. Gates III of Microsoft Corp. One of Gerstner's key moves was to shift 25% of the company's research and development budget into projects that fall under the rubric of so-called network-centric computing. He also declared that IBM product—from tiny laptop



LOUIS V. GERSTNER JR.

IBM

Position: Chairman and CEO

Contribution: An early Net believer, he mobilized the computer giant to make Internet technology and services a top priority.

Ambition: Have IBM stand for Internet Business Machines.

revolution," he declares. He's zeroing in on operations such as supply-chain management, customer service, logistics, procurement, and training. As chief of the world's top tech-services company, Gerstner crows: "We're right in the middle of the sweet spot."

Lou Gerstner the Internet visionary? Believe it. He was ahead of many in the

mighty mainframes—must have some of Web hook. The best part: Other executives at the company, worried they would appear technologically rant next to their chairman, started getting wired. And as Gerstner showed, that's no trivial pursuit.

—By Ira



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PEHONG CHEN

BROADVISION INC.**Position:** Chairman and CEO**Contribution:** Pioneered off-the-shelf software for transforming Web sites into e-stores.**Ambition:** To make the online shopping experience so easy that anyone could do it.**PEHONG CHEN**

If he's lucky and works really hard at it, Pehong Chen has the opportunity to become for electronic commerce what McDonald's Corp.'s Ray Kroc was to hamburgers. Like Kroc, Chen took a concept that had been around for a while and figured out how to make the market explode. E-commerce software sold by his Silicon Valley startup, BroadVision Inc., has the potential of helping cybershops worldwide match McDonald's claims of billions and billions served.

Never mind fast food. This is fast software. In the early days of e-commerce, companies typically cobbled together their own technology for selling things online—a process that could take months. BroadVision's software, first released in 1995, allows Web sites to get their virtual cash registers

up and running in as little as seven weeks. And, while BroadVision has plenty of competition now, one of its advantages is that its software keeps things simple for shoppers, too. "Our goal is to automate [shopping for] my mother-in-law," says Chen, BroadVision's 41-year-old founder and CEO.

He is already automating a ton of Web sites—300 so far, including everything from Home Depot Inc. to Hershey Foods Corp. The past year has been a whopper. The

Redwood City (Calif.) company's sales rose 95% in the first half of 1999, to \$41 million. And things only look to get better now that e-business is really taking off. Forrester Research Inc. says worldwide sales will reach \$3.2 trillion by 2003. The biggest challenge is that there are only 24 hours in a day," Chen says. "There's so much business out there it's incredible. Now, that's cooking.

—By Timothy J. Minchin

DAVID C. PETERSCHMIDT

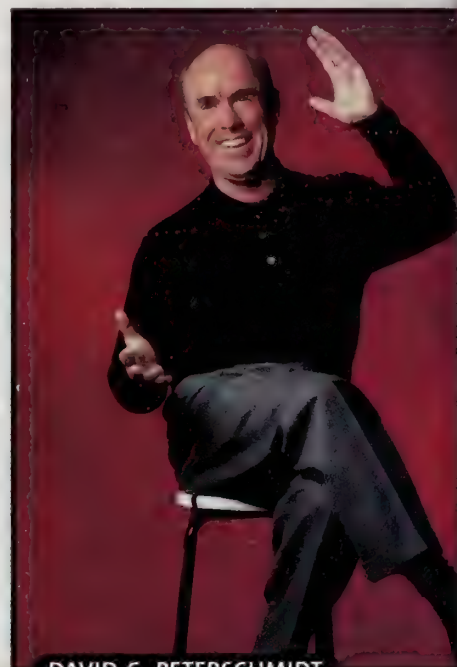
If you wanted an exciting career and had to pick between being an Air Force pilot, working on the original B-1 bomber project, or running a software company, which would it be? For David C. Peterschmidt, 52, who has held all three of these jobs, the answer is easy: software. He's now piloting Inktomi Corp., one of the hottest Internet startups around.

The Berkeley (Calif.) fledgling isn't nearly as well known as Yahoo!, America Online, or Excite@Home, but all three online megastars depend on Inktomi's Net speedup or search technologies to power their Web sites. In fact, more than 50 large Web sites rely on Inktomi's products to stay competitive—making it a key technology arms dealer for the Web. Peterschmidt's goals are as grand as they get: He wants Inktomi to provide the technology foundation on the Net, much as Microsoft's Windows operating system is the crucial software for personal computers. The software may reside largely behind the scenes, but "we're supplying a unified operating system for getting information on the Web," says Peterschmidt. "This is about dominance."

That strategy is paying off. Inktomi reported revenues of \$19.2 million for the quarter ended June 30, up 212% from a year earlier. It's still

racking up losses (\$6.3 million last quarter), but investors have pushed the company's market value above \$5.5 billion. Inktomi recently added Web-shopping software, which could boost sales growth even further. If so, Peterschmidt will drive Inktomi as fast as he does his mint-condition 270 GBT Ferrari.

—By Michael J. Sauter



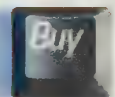
DAVID C. PETERSCHMIDT

INKTOMI INC.**Position:** President and CEO**Contribution:** His search engine makes finding things easier on major Web sites such as AOL and Yahoo!**Ambition:** Making Inktomi's technology for speeding access to Web information a platform that other companies build upon—like Windows is for the PC.

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No getaway cars.
No itchy ski masks.

If you think the Internet has made it easy for shoppers, imagine what it's done for thieves.

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KEVIN J. O'CONNOR

Four years ago, Kevin J. O'Connor helped revolutionize an industry he knew very little about when he started DoubleClick Inc., the first Internet advertising network. To his way of thinking, ignorance was an advantage. Being a tech guy who had already launched a communications software startup, he wasn't stuck in traditional ad-think. Instead, he and co-founder Dwight A. Merriman were able to spot something that the Web—unlike TV, radio, and print—was uniquely suited to do: instantly deliver ads to the right customers at just the right time.

O'Connor's creativity didn't stop there—and that's why he stands out as the leading architect for the burgeoning Web advertising business. Instead of starting a company that simply created ads or bought banner ad space for a handful of clients, the 38-year-old entrepreneur focused on bigger game: building a brand new kind of advertising

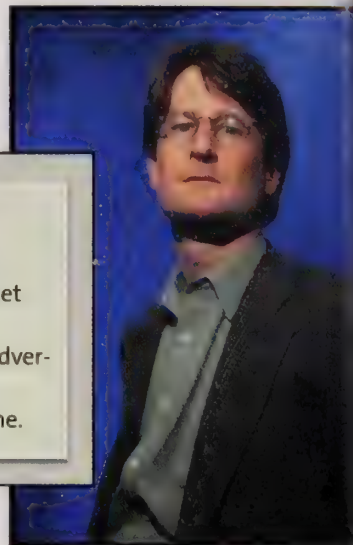
company tailored to the Web. Today, DoubleClick represents a network of 490 Web sites, including AltaVista, and serves as a middleman between them and 3,100 ad-

KEVIN J. O'CONNOR**DOUBLECLICK**

Position: Co-founder and CEO

Contribution: Created the first Internet advertising network.

Ambition: To achieve the Holy Grail of advertising: delivering the right ad to the right consumer at the right time.



vertising clients, such as General Motors Corp. and Visa International. On top of that, it provides powerful technology used within the network and by other sites to measure ad performance.

O'Connor's new ambition is to achieve the Holy Grail of advertising—true one-to-one marketing. He plans to match up the

company's huge collection of consumer shopping data with the latest advertising techniques. If O'Connor accomplishes his advertising might finally live up to its promised potential on the Web.

—By Heathcliff

ELLEN M. HANCOCK

In July, 1997, Ellen M. Hancock had a serious self-confidence problem. Despite a 29-year career at IBM, she was pushed out as chief technologist of Apple Computer Inc. by the mercurial Steven P. Jobs. She wondered if she should bother seeking a CEO job given what she describes as a sullied reputation.

Her blue period is over. Since joining Exodus Communications Inc. in March, 1998, Hancock, 56, now CEO, has emerged as a driving force behind one of the hottest new trends in cyberspace: Web hosting. With Internet startups and old-guard behemoths alike wanting to get on the Net with a minimum of money and hassle, dozens of companies have sprung up, offering to run their Web operations for them. Hancock offers a sorely needed nuts-and-bolts approach that is convincing customers they can entrust their most vital computing jobs to outsiders via the Web. Next up: She plans on making Internet communications more secure by

running them across private networks. "I think we can change the way the Net looks and feels," she says.

Clearly, Hancock has the right idea. With a network of 22 data centers around the nation, Exodus, now No. 1 in Web hosting, is catapulting toward the front of the pack. Last year, the company's revenues grew a staggering 308%,

ELLEN M. HANCOCK**EXODUS COMMUNICATIONS**

Position: CEO

Contribution: Proved that data-centers-for-hire can be trusted to handle corporations' most vital information over the Net.

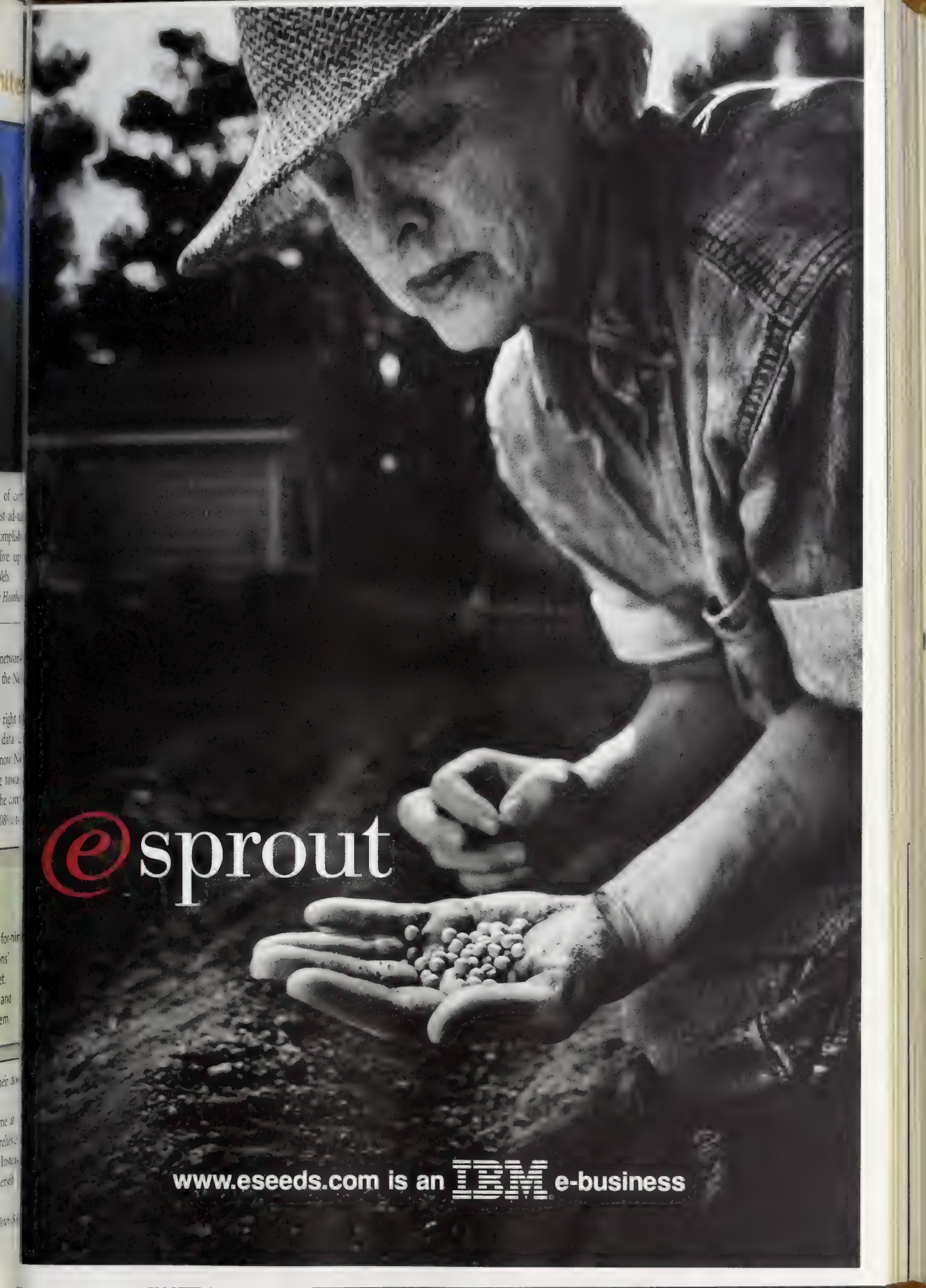
Ambition: Make the Web as reliable and taken for granted as the phone system.



million, and forecasts call for their doubling again this year.

While memories of her time at Apple are still smart, Hancock is just relieved she didn't finish her career there. Instead, she has forged a critical place for herself in the New Economy.

—By Peter H.



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You hear the success stories: e-commerce is creating mega-brands virtually overnight. e-commerce is transforming old companies into Web-savvy players. e-commerce is the great equalizer.

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Information Week writes: "e-commerce is an engine for high revenue growth — and even higher Web site unpredictability." And from *Forbes*: "e-commerce looks promising. Now comes the hard part: making it work."

Fact:

IBM scalable servers help **Charles Schwab's** customers trade over \$2 billion a day online.

The power of e-commerce is obvious (just take a look at the stock market). But gearing up so you can sell online can be a lot trickier than it looks at first glance.

It doesn't matter what you're selling or what kind of business you're in. You can be a company of thousands, hundreds, or maybe the company is just you. Regardless, IBM can help.

We can show you how to seize e-commerce opportunities and understand the issues. And there are significant issues: Pricing and distribution issues. Inventory issues. Back-end issues. How do you connect with your suppliers? Your vendors? What about Web traffic and security? What about customer service?

There's no one answer. No owner's manual or magic formula. e-commerce solutions are about as different as the companies that are taking advantage of them.

Fact:

An IBM RS/6000® Web server helped **REI** grow worldwide online sales by 360% in 1998.

For example, how does a financial broker plan and manage for growth when the very nature of the business is unpredictable and volatile? If you're schwab.com — the world leader in online investing — you do it with a massively

scalable IBM Web solution that can handle a large volume of traffic as well as over \$10 billion worth of transactions online every week.

What if you're a regional retailer and want to go from having a few store locations to being a world player? If you're rei.com you employ a powerful IBM e-commerce solution that enables you to sell everything from camping gear to kayaks, reaching customers nearby or in the Far East (REI is now doing a brisk business in Japan, with this year's online sales exceeding last year's by an extraordinary 400%).

And what if you're a tried and true brand and want to expand your business? If you're nationalgeographic.com you use IBM e-commerce technology to relaunch your online store, merchandise new products and increase online sales.

Even emerging companies like eseeds.com, cdwarehouse.com and champagnelady.com are coming to IBM for help in taking advantage of e-commerce opportunities.

IBM has everything from robust e-commerce software solutions, like WebSphere™, Net.Commerce™ and HomePage Creator, to high-volume IBM Web servers and Web hosting services.

For e-commerce expertise in industries as varied as manufacturing, banking, retail and health care, there are the 130,000 consultants, strategists and implementers of IBM Global Services. These are people with "been there, done that" experience, who have the tools to help you build and maintain a secure, scalable e-commerce site.

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We're a medium/large corporation seeking to achieve strategic competitive advantage using e-commerce. We have a significant IT department.	• Determine effective e-commerce strategy • Integrate with existing systems • Get support to optimize performance • Maximize ROI

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A black and white photograph of a hula dancer figurine standing on the hood of a car. The figurine is wearing a traditional grass skirt and a flower lei. The car's hood and grille are visible in the foreground, and the background is blurred.

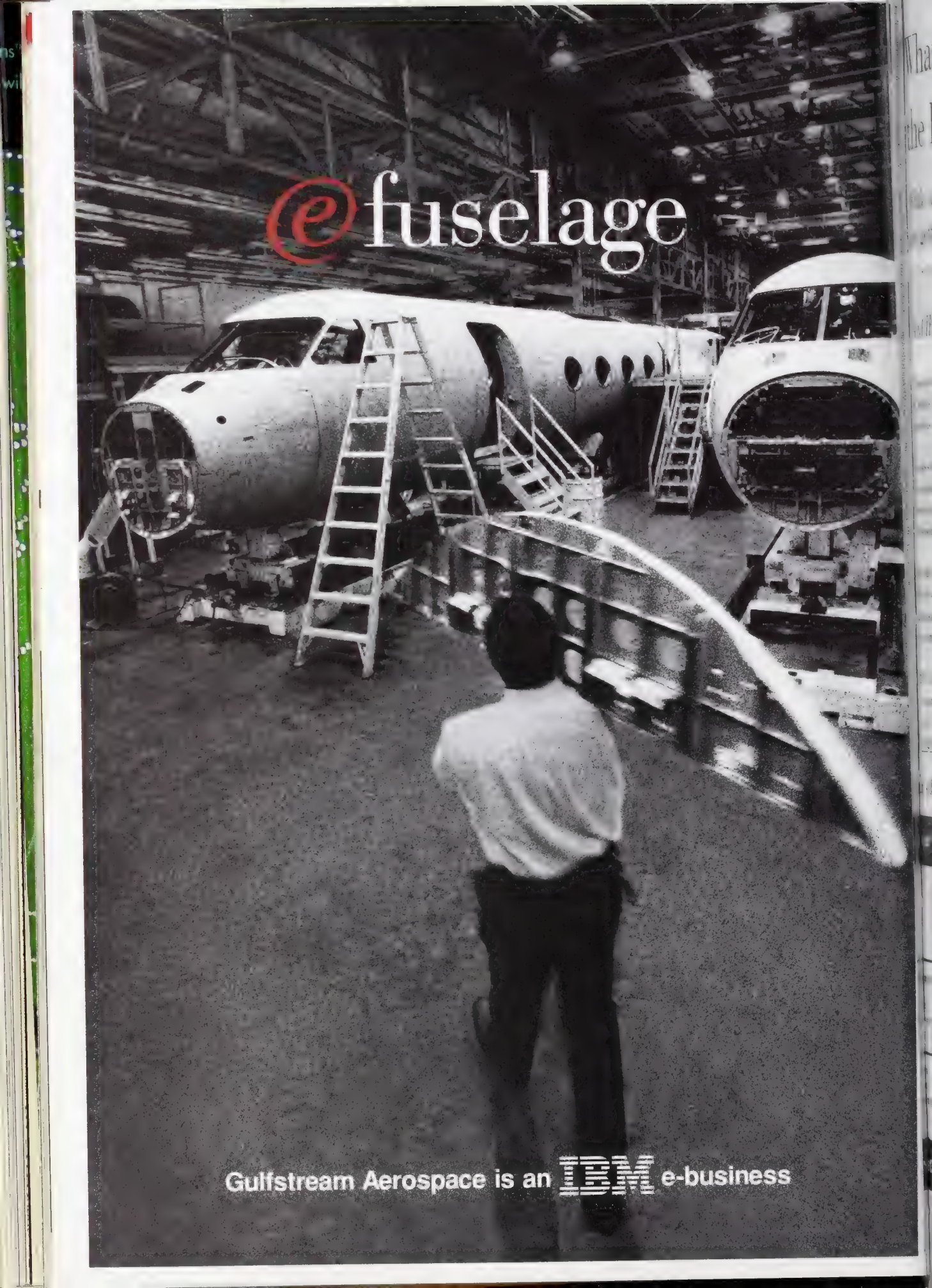
@hula

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A black and white photograph of a car chassis on an assembly line. The chassis is in the foreground, with its front end partially assembled. It is positioned on a conveyor belt. In the background, other car chassis are visible, and a worker is standing near one of them. The scene is illuminated by overhead fluorescent lights, creating a sense of depth and industrial activity.

@chassis

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Gulfstream Aerospace is an **IBM** e-business

What? You don't think the page on the left applies to you?

While online sales of books, CDs, videos and other consumer products are getting all the headlines, there is another big opportunity in e-commerce: businesses selling to other businesses.

And IBM is helping thousands of them do just that.

"Check out these numbers," wrote e.biz in the March 22 edition of *Business Week*. "E-commerce between businesses is five times as much as consumer e-commerce, or about \$43 billion last year."*

It makes sense, actually. Businesses already run their entire operations on computer networks and use those networks to communicate between locations, subsidiaries and suppliers. For them, adding Web-based e-commerce systems is simply the next logical step.

What do you need? Where do you start? What are your options? How do you avoid investing a fortune in hardware, software and administrative overhead? What e-commerce solution is right for your company and your industry?

IBM helps companies answer questions like these every day. Companies like Mercedes-Benz, Shell Services International, as well as more modestly sized companies like PETsMART and High Valley Safety Supply Co.

are selling. This chart can show you how.

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Whether it's Web hosting services, software like WebSphere and Net.Commerce, or high-volume UNIX® and Windows NT® Web servers, IBM has tools to help you build and grow sophisticated, interactive e-commerce Web sites. And get you up and running right away.

Also ready to go to work for you now (as we mentioned on the previous page) are the more than 130,000 consultants, strategists and implementers of IBM Global Services. These are people who have real world problem-solving experience. And because they know specific industries — yours — they have the expertise it takes to help you make the most of the e-commerce opportunities that are out there.

These are just a few of the ways we're helping businesses:

Direct online sales. Just as IBM is helping Gulfstream sell airplane replacement parts to corporations worldwide, we're also helping retailers, financial companies and a variety of manufacturers make the most of e-commerce.

Vendor extranets. Setting up a network that helps link you to your vendors can cut inventory carrying costs and make your company more responsive. After employing an IBM extranet, PETsMART, the pet superstore, estimates a 20% reduction in its inventory of imported products.

Dealer-distributor extranets. IBM has helped companies like SAAB link directly to their dealer networks — enabling dealers to order and process transactions online. This increases dealer productivity and reduces paperwork, sending profits direct to the bottom line.

Online procurement. e-commerce is also about streamlining. For IBM (yes, we're an e-business, too), Web-based procurement means a \$240 million savings. This has reduced the number of paper invoices from five million to zero.

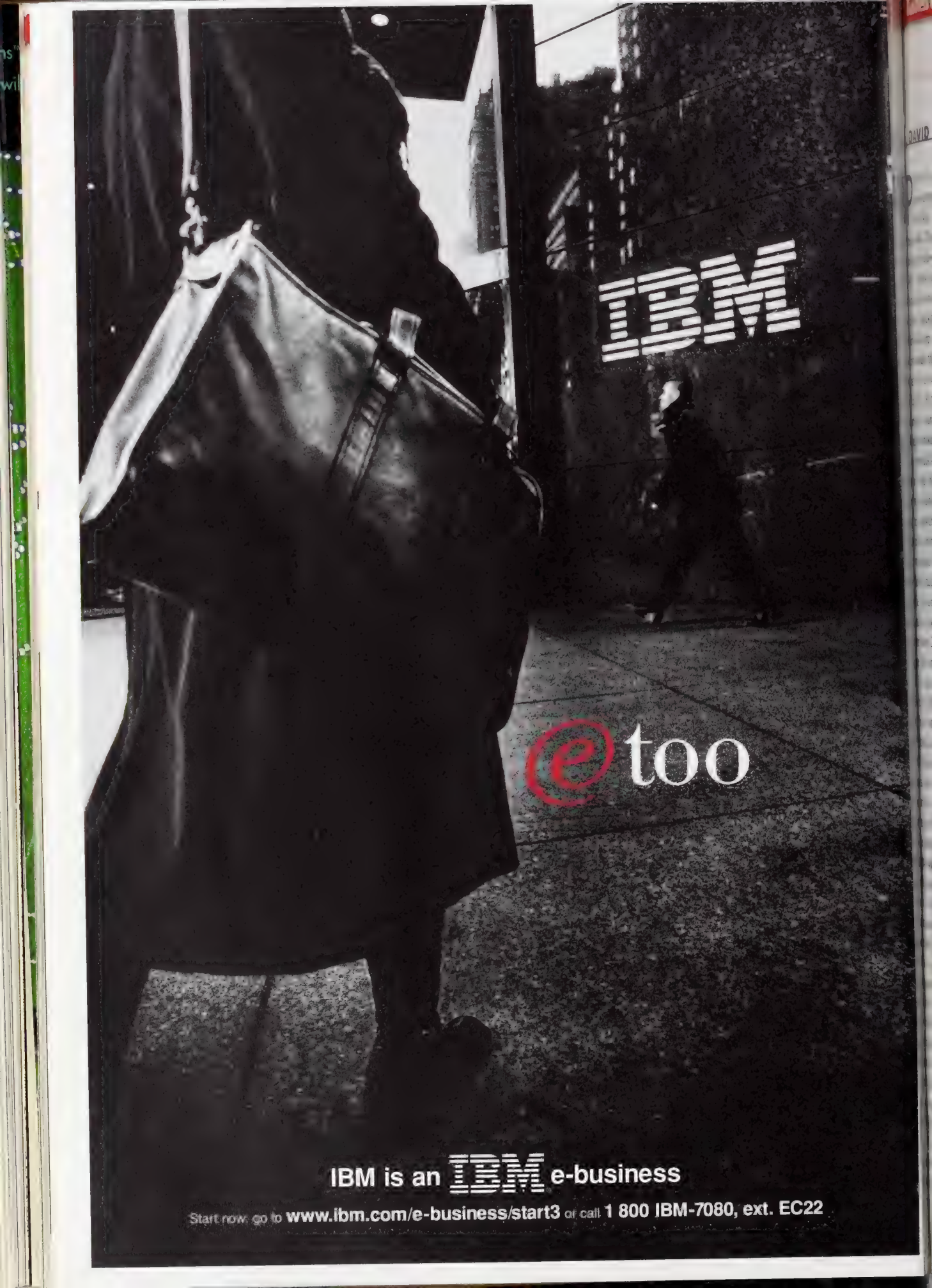
Fact:

Gulfstream now processes 7 out of 10 parts online, with the help of an IBM RS/6000 Web server.

Fact:

An IBM Global Services electronic supply chain solution helped Mercedes increase M-class production by 20%.

IBM



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[pacesetters]

DAVID S. POTTRUCK

plenty of successful companies are just now getting around to cashing in on the Net. And they're starting from a hole. Think Barnes & Noble Inc. It's having to claw frantically to catch up with

book-selling pioneer Amazon.com Inc. But discount stockbroker Charles Schwab Corp. was no Charlie. Lately, thanks to the foresight of co-Chief Executive David S. Pottruck, Schwab truly stands tall as the largest broker in cyberspace.

Pottruck's track record is one that by moving aggressive, established companies to transfer their successes from terra firma to cyberspace. As of June 30, Schwab had 2.8 million online accounts, up from 1.8 million a year ago. It has an impressive 25% share of average daily trades, according to Bancorp Piper Jaffray. P. Eberling, managing director at investment bank Citicorp, Lovell, de Guardiola & Thornton Inc., says Pottruck sets an outstanding example for others: "He took an old business and turned it into a new one."

GOALS AND AMBITIONS. Now Pottruck is teaching a whole new set of lessons—about how companies can thrive by bridging the worlds of Net and non-Net. So-called "clicks and mortar" strategy: marry Net-based trading and customer service with Schwab's call centers and network of 300 retail branches. Staffers in the branches, for instance, can teach computer novices face-to-face how to navigate Schwab's Web site. "We want to combine the best of the physical world with the best technology," Pottruck says.

Former college wrestler and football player, the 51-year-old Brooklyn (N.Y.) native's ambitions are as broad as his shoulders. While Chairman and co-CEO Charles

R. Schwab sets the overall tone and direction of the company, Pottruck oversees day-to-day operations and comes up with strategies of his own. It was Pottruck who turned Schwab's online business from a sideline into the very soul of the company.

That was surprising, since he didn't

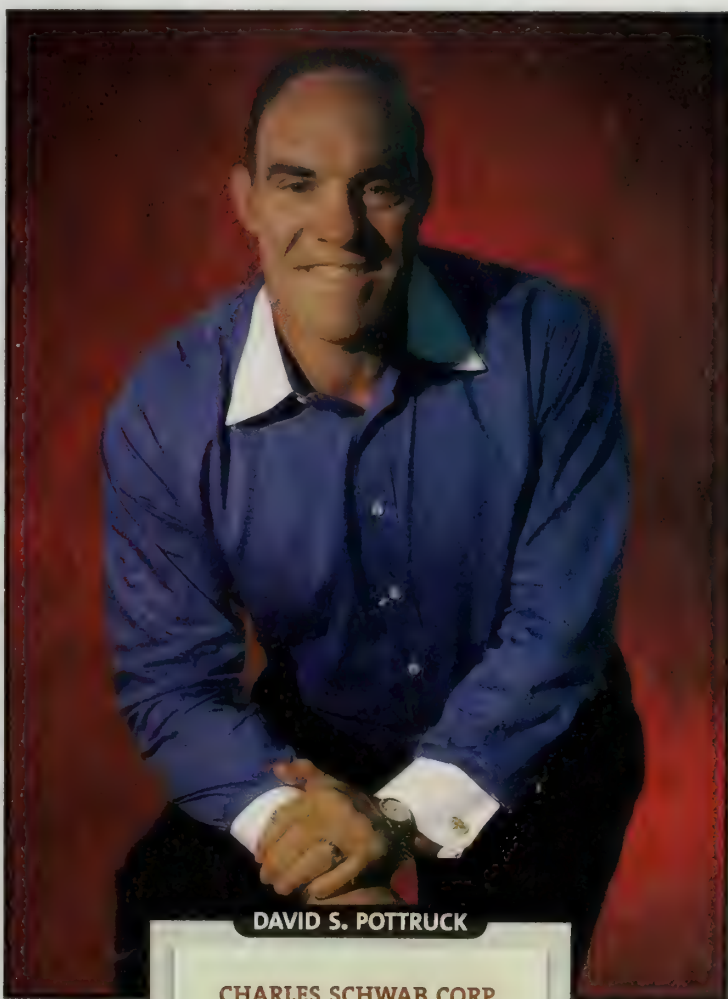
start using a PC himself until 1995. But itching to become more efficient at work, he had a machine put on his desk. In no time, Pottruck was hooked—shooting around e-mail and pulling up spreadsheets like a veteran techie. "The Internet was starting to blossom in 1995, so my timing was good," says Pottruck.

Pottruck wisely set up a separate online unit—a startup-style operation with its own building, hiring plans, and power to make decisions fast. Its mandate: develop the technology and marketing needed for a full online push. The unit introduced trading over the Net in April, 1996—beating all of the established Wall Street companies. Later, he folded the online unit into the company after it had accomplished its goals.

Now Pottruck is turning up the dial on his clicks-and-mortar strategy. He believes that the vast majority of Schwab customers can digest information independently, but ultimately, many want a human sounding-board for their investment ideas. To help, he's installing PC kiosks in Schwab's branches. That way, customers can check their accounts, make a trade, or get help from a service rep on the spot.

Pottruck faces plenty of challenges. Schwab's \$29.95 trades are far from the cheapest—Ameritrade Inc. charges just \$8 per trade. So he's got to convince customers that his services are worth the premium price. In part because heavy customer traffic on Schwab's Web site occasionally slows down service, he's spending big to beef up computer systems—\$324 million, or about 11.8% of revenue last year. "The process of building better technology is just beginning," Pottruck says. And if growth on the Net keeps going, this late-blooming techie is just getting started, too.

—By Louise Lee



DAVID S. POTTRUCK

CHARLES SCHWAB CORP.

Position: President and co-CEO

Contribution: By embracing the latest technologies, he transformed a phone-based stock trading service into the No. 1 player on the Web.

Ambition: To create a combo of phone, face-to-face, and Web services that leaves the rest of the investment houses in the dust.

JOHN T. CHAMBERS

Nobody is more responsible for laying the foundation for e-business than John T. Chambers, CEO of Cisco Systems Inc. For starters, Cisco supplies the technology plumbing that powers the Internet. And just as important, Chambers is the world's most passionate advocate of e-business. From hob-nobbing with President Clinton to jawboning Chinese President Jiang Zemin in Beijing, Chambers is on a whirlwind mission to convince business and government leaders to embrace the Net Economy. "We're living through the second Industrial Revolution," he says.

Chambers preaches Net religion like a Billy Graham wannabe. In the past year, he has spent half his time on the road,



JOHN T. CHAMBERS

CISCO SYSTEMS

Position: CEO

Contribution: Leads No. 1 seller of Internet equipment and ceaselessly promotes e-business with corporate and world leaders.

Ambition: To grow the Net into the backbone of all communication, changing the way people "work, play, live, and learn."

meeting 30 heads of state and countless executives. His message: the Internet is already worth a staggering \$300 billion in the U.S. alone and by 2010, e-commerce will be 25% of the world's GNP, according to a University of Texas report commissioned by Cisco. Chambers laces his vision with dire warnings to laggards. "You can be Amazoned in a moment," he says.

The hard sell seems to be working. "Chambers has made himself into the No. 1 communicator of the networked vision," says Eric E. Schmidt, CEO of software maker Novell Inc. What makes Chambers so

convincing? He made Cisco into an example of how the Internet can streamline processes and slash expenses. Some 70% of the company's sales come via the Web. And the company performs every other corporate function using Net systems, including manufacturing, personnel, and even customer support. All told, Cisco saved \$1.5 billion in costs over the last three years by aggressively using Net technology. With the kind of lead Chambers can afford all his hob-nobbing away from headquarters.

—By Andy Roth

MICHAEL S. DELL

When it comes to exploiting the promise of the Internet, Michael S. Dell is taking the rest of Corporate America to school. Other executives at first scoffed at this geeky new world, but Dell made sure his Dell Computer Corp. had set up shop on the Web by 1995—olden days in Internet time. Now, the company is one of the top merchants in cyberspace, selling \$30 million worth of computer gear a day. And, after being e-engineered from top to bottom, Dell may be the only company that has made itself a Net company without selling Net products.

It was Dell himself who led the charge. The 34-year-old identified and exploited benefits of doing business online, from pumping up sales to slashing the cost of taking service calls. Dell has spent heavily to improve the customer's experience at Dell.com—such as a new feature that lets purchases made online flow directly into a corporate customer's accounting systems. The payoff: "We can interact much, much more efficiently with them than with their rivals," says Ford Motor Co. CIO James A. Yost.

Just as important is what happens behind the scenes at Dell, where the company—and often Michael Dell himself—scrutinizes what is selling, in real-time, in order to get



MICHAEL S. DELL

DELL COMPUTER

Position: Founder and CEO

Contribution: Showed the rest of the world how to make the Web the foundation of an existing business.

Ambition: Make Dell the No. 1 PC company worldwide, overtaking Compaq.

a jump on competitors. To make the process as efficient as possible, the company is establishing electronic links with its top 30 suppliers. The result: Dell has

turned on investment of 260%—easily four times the nearest competitor.

And Michael Dell is still cranking up his "e-service" concept to the next level: hardware that can automatically diagnose its problems and notify a service technician over the Net. "Think of the Internet as a weapon there on the table," he says. "You pick it up or your competitor does. But somebody is going to get killed. Dell's rivals, that's a scary prospect."

—By Pete Dink



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[Commentary]

CATHERINE C. YIN

The Great Equalizer? Not By a Long Shot

It'll take conscious effort to make the Net more minority-friendly

The Internet was supposed to herald the dawning of a new era of fairness. As the great leveler, the Web would put obscure entrepreneurs, smart 15-year-olds, and outsiders of every stripe on the same footing as multinationals and the rest of the Establishment.

But as BUSINESS WEEK identifies e.biz's top 25 movers and shakers, the executive elite of this new industry looks a lot like the traditional corporate world. Nineteen are white men, four are white women, one is Asian American, and one a Japanese citizen. None is African American or Hispanic. In Corporate America as a whole, white males account for about 56% of managers; white women 32%; African Americans 6%; Hispanics 3.2%; Asian Americans 2.5%; and Native Americans less than 1%, according to the U.S. Equal Employment Opportunity Commission.

Not that we didn't try hard to avoid overlooking anyone. We racked the brains of our editorial staff and queried Net gurus to identify the captains of this new industry. But here's the sad truth: Few minorities have emerged as leaders of top-tier e-businesses.

What happened on the way to the e-revolution? For all the hype about a new order in cyberspace, the old order, for the most part, still rules. While the high-tech crowd likes to view itself as a meritocracy where nothing matters but brains and moxie, this credo masks an important truth: Relationships and crony networks count heavily, even in e-business. Who you know still helps determine whether you'll get a crack at leading one of the companies at the cutting edge of this new industry.

Cozy relationships are hardly the only factor, though. African Americans and Hispanics often don't have the backgrounds and experience considered by



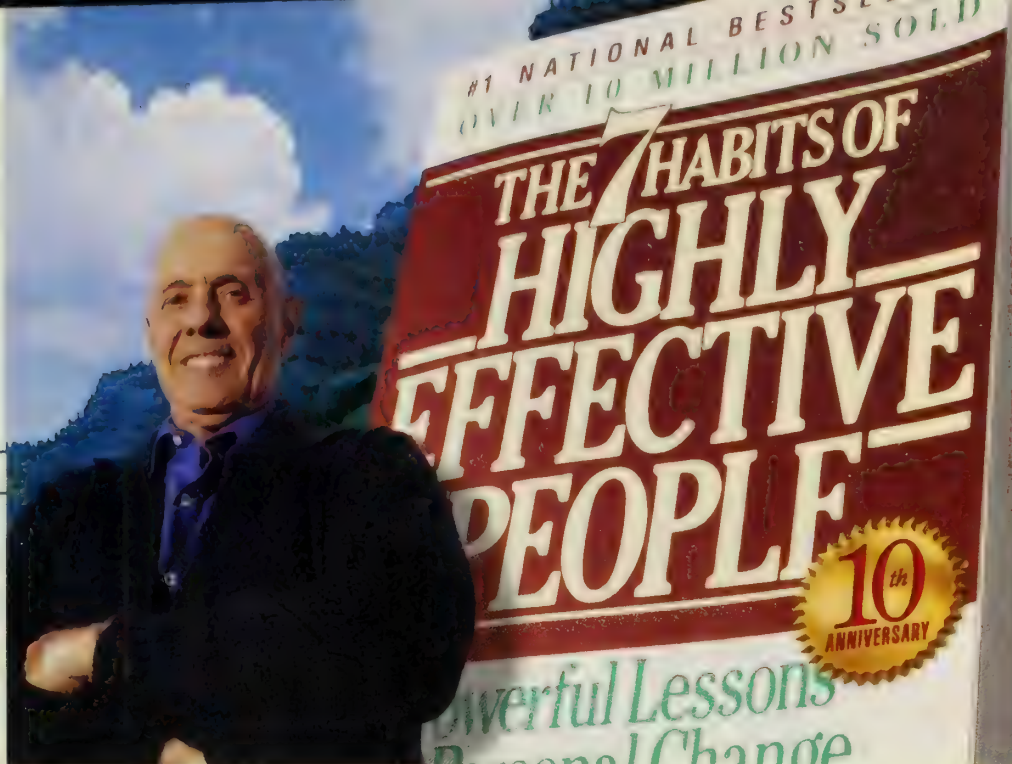
many to be necessary for the Internet. Just 7.2% of engineering and computer science degrees went to African Americans and 5.9% to Hispanics in 1996, according to the National Science Foundation. And only 23% of African-American households are online, compared with 34% for white Americans, 36% for Hispanics, and 64% for Asian Americans, according to Forrester Research Inc.

But rationalizing a largely white male leadership doesn't make it good or right. Remember, the promise of the Net was something more revolutionary than making twentysomethings into multimillionaires: It was about transforming the daily lives of all people. The masters of this new universe must recognize its lack of diversity as a shortcoming if they are to lead the Web to its full potential. Without more managers of color who can tap into the hopes and dreams of

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The 7 Habits of Highly Effective E-Commerce.

We asked Stephen M.R. Covey, son of the author and President of the Training and Education division at Franklin Covey, the company that helps people become more effective, what makes an e-commerce site effective.

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2. Reliability. "Like a Franklin Planner®—available 24x7x365."
3. Scalability. "Our e-commerce business is going to grow."
4. Personal. "All our business is person-to-person."
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the people who use the Net, the Web could end up reinforcing the divisions within society instead of erasing them. "Ultimately, if this is going to be a mass medium, it's critical that it be reflective of society," says America Online CEO Stephen M. Case.

Fortunately, there is a kernel of truth to the idea that the Net can be a democratizing force. In 1998, immigrants of Indian and Chinese descent ran 25% of Silicon Valley high-tech startups, according to a study by University of California at Berkeley Professor AnnaLee Saxenian. There are examples of success elsewhere, too. Consider Benjamin Sun, the 26-year-old CEO of New York's Community Connect Inc. At first he was unable to get funding for Asian-avenue.com, a portal for Asian Americans, because the concept of an online gathering place for an ethnic community didn't resonate with venture capitalists. "The idea was foreign to them, because the people we approached were not people of color," says Sun, a former Merrill Lynch & Co. investment banker. But after he scraped together 100,000 members in his first year, he was able to attract \$4.5 million in financing.

And the number of women tech executives is on the rise. Carly Fiorina became the first female CEO of

a Dow 30 company when she was named to head Hewlett-Packard Co. in July. eBay CEO Meg Whitman and Exodus Communications CEO Ellen Hancock have become industry stars. And they're working hard to encourage women's success in the future. For example, Hancock has mentored 15 female entrepreneurs.

But these are exceptions to the lack of diversity. You can count on one hand the blacks and Hispanics who hold real power in the industry. There's E. David Ellington, CEO of Net Noir, a San Francisco-based portal targeting African Americans. Robert Knowling, CEO of Covad Communication in Santa Clara, Calif., rules a telecom company. Fernando Espuelas, CEO of Star Media Network Inc., has had his site dubbed the Yahoo! of Latin America. Raul Fernandez, the Cuban-American CEO of Proximicom in Reston, Va., sells



e-commerce software. These leaders suggest talent is available, but they're a tiny group in the defining business phenomena of our time.

The problem in part stems from a sometimes-unconscious reliance on the old-boy network. When venture capitalists look for managers for the startups they fund, they often look first to friends and colleagues. "These companies are founded by small groups of friends, funded by friends of friends, and grow into businesses that look like them," says Joseph Mouzon, the black CEO of Imhotech, a Redwood City (Calif.) company that designs music and entertainment Web sites and software.

As the world of business is changed by the Net, it's important to listen to new voices. Some black leaders feel free markets alone won't make diversity happen. Angel investors, VCs, and CEOs should be mindful of promising minority entrepreneurs. Ellington suggests that VCs earmark a certain percentage of their funds for minorities. Beyond money, they can offer advice, as Hancock is doing. As this generation of minority entrepreneurs grows from rags to riches, it can seed a new wave of minority-led companies.

With blacks and Hispanics coming online fast, it makes sense to diversify at the top. African Americans still have the lowest percentage of online usage today, but the number will soar to 40% next year, according to Forrester. Hispanic households online will surge to 43% in 2000, from 36% this year. As Net users diversify, there will be increased demand for sites tailored to ethnic tastes.

If the minority presence in leadership roles doesn't soon reflect the general population or the online population, it will be time for Net boosters to ask themselves why what was supposed to be a democratizing influence didn't work out that way. The answer may be in the nearest mirror. ●

Ellington: Venture capitalists should earmark cash for minority

WHO'S LAGGING IN THE NET AGE

Although they are the largest minority groups in the country, blacks and Hispanics have lagged in Net access and tech management. That has hurt their ability to break into the top tier of e-business.

PERCENTAGE OF U.S. HOUSEHOLDS*

WHITES	85%
AFRICAN AMERICANS	12
HISPANIC AMERICANS	8
ASIAN AMERICANS	3

*DOES NOT ADD UP TO 100% BECAUSE OF DOUBLE COUNTING. DATA: U.S. CENSUS

PERCENTAGE OF ONLINE POPULATION, 1999

WHITES	78.7%
AFRICAN AMERICANS	7.5
HISPANIC AMERICANS	7.8
ASIAN AMERICANS	5.2

DATA: FORRESTER RESEARCH INC.

PERCENTAGE OF MANAGERS IN SILICON VALLEY HIGH-TECH INDUSTRY

AFRICAN AMERICANS	2.4%
HISPANIC AMERICANS	3.3

DATA: COALITION FOR FAIR EMPLOYMENT IN SILICON VALLEY

ONLINE LINK

For interviews with Net Noir CEO David Ellington and other minority executives, see ebiz.businessweek.com.

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A Neanderthal Industry Smartens Up

How the electrical-parts biz got the glitches out

John E. Haluska is a bear of a man whose gray beard makes him look more like Santa Claus than an Internet visionary. But three years ago, while the chief information officer for \$2.2 billion electrical-parts maker Thomas & Betts Corp. was visiting a distributor, he passed the accounts payable office and noticed a

large stack of documents with his company's name on them. When he asked about the papers, he was told: "It's T&B day." On such days, eight hours are spent crawling through the paperwork, addressing snafus between the distributor and Thomas & Betts—missed

shipment dates, damaged goods, and, mostly, price discrepancies. Haluska estimates that it costs his company about \$300 to straighten out each gnarly inconsistency. After learning others had the same nasty problem, "That got me thinking," he says.

ROGER O. CROCK

Good thing. There's bedlam in the billion electrical-parts industry. According to industry executives, upwards of 70% of administrative costs go into correcting errors. Even highly automated organizations like Haluska's are struggling. Thomas & Betts's distribution center, 70 miles southeast of Memphis, 70,000 different parts—from pipe connectors to light bulb fittings—are sorted by a maze of conveyor belts and shipped to distributors across the country. It's an efficient operation, but there's one problem: There are scores of distributors like the one Haluska visited that day, lacking the ability to quickly

Electrical supplier Crum: He dreamed of getting out of the dead tree world of paper, with its frequent and costly errors.

items they need with the ones T&B ships. Workers instead spend time reshipping wrong orders or chasing down lost parts. The industry has "not had the good technology to back up and understand how to store and track all of its parts," explains Clyde R. Moore, Thomas & Betts CEO.

All that is about to change. Thomas & Betts and some 225 other companies are shaking their antiquated ways and working furiously to enter the Internet era. In September, the industry launched iDXchange, a cutting-edge private network linked to a massive database that catalogs parts and carries orders between manufacturers and distributors in a snap. While the new system isn't designed to enable such market-forming innovations as real-time auction comparison shopping, doing business on iDXchange is expected to cut labor and telecommunications costs by some 50% a year. "We're an industry that is certainly a bit Neanderthal," says Malcolm O'Hara, president of the National Electrical Manufacturers Assn. "But we're taking a quantum leap from the back of the pack to the front of the pack."

The custom network puts the industry light years ahead of its traditional way of doing business. For eons, electrical manufacturers and distributors have zapped

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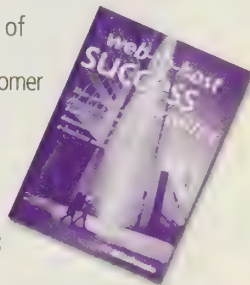
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The Advantage of Information.

portant sales data to one another using a system called electronic data interchange or EDI. Information on an invoice or sales order was coded based on arcane EDI definitions, then converted to bits and transported through a maze of electronic networks. While each part or category was standardized, the actual way of conveying the categories was not. One company might identify the shipment date with dashes and another with slashes.

That led to a raft of manual errors—nearly 20% of orders had typos or other goof-ups that required at least a phone call to clear up. For example, when a worker at Crum Electric Supply Co. in Casper, Wyo., typed in the wrong part number, the distributor mistakenly ordered a \$100,000 motor instead of a set of \$2,200 light fixtures. Crum had to ship the motor back and was charged a 25% restocking fee. "It just killed us," says owner David Crum.

Haluska was feeling the same pain. The CIO cringed at EDI costs that hit more than \$10,000 a month. Those were the charges

for sending data to a kind of electronic post office that forwarded it to designated distributors and vice versa. Many others in the industry had similar, if not higher, costs. "Small players couldn't even play," Haluska says. Add to that this stinger: There was nothing real-time about the old EDI system. Electronic orders didn't automatically

"Until we talk apples to apples, electronic commerce can't take off"

pop up in a virtual inbox like they do today. Instead, the EDI system required companies to dial up and fetch data out of their mailbox. That meant most transactions were sent or received at the end of the day, making same-day shipments a rarity.

Haluska dreamed of a network that would bypass the expensive proprietary EDI system and simply speed data along a network using open Internet standards. With cheaper Net gear, costs could be slashed significantly. Indeed, using the new network, T&B now pays a fixed connection and

usage fee of up to \$2,900 a mo

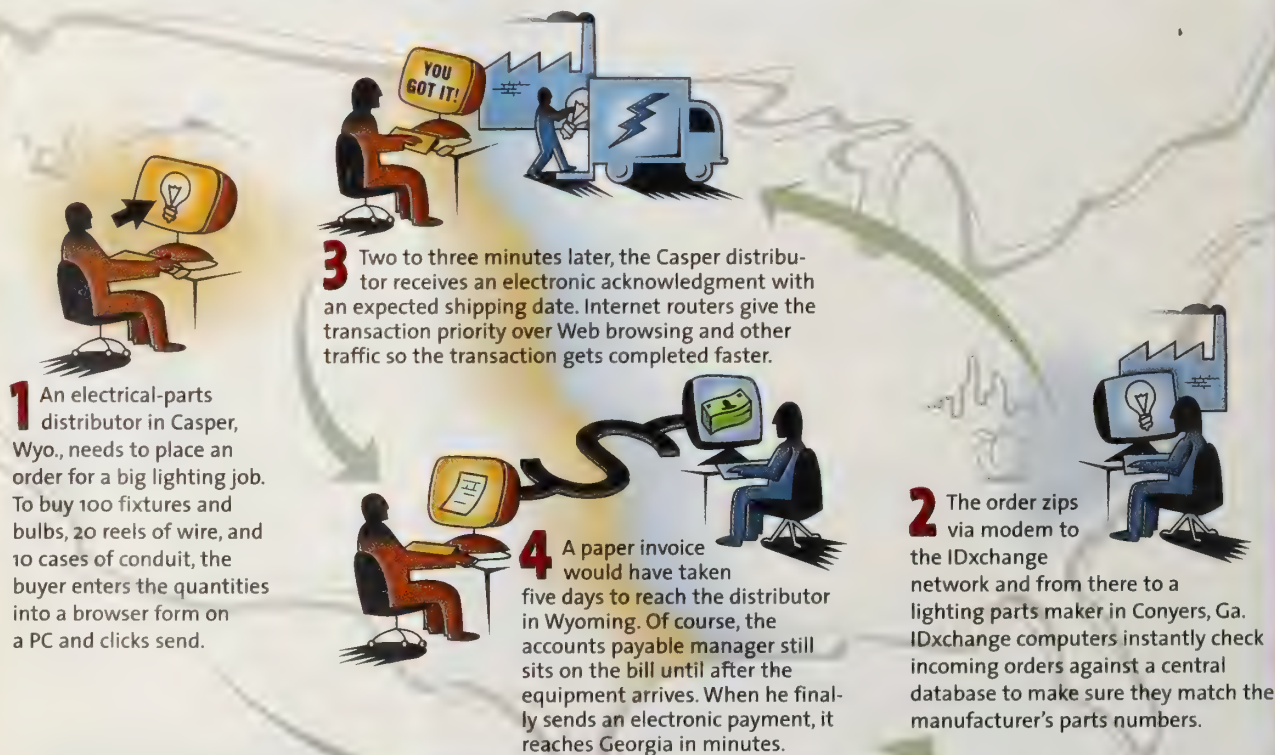
Haluska's brainstorming paralleled visions of Crum, the owner of Crum Electric. Crum had been watching anxiously as retailers such as Wal-Mart Stores Inc. automated their check-out and distribution processes, while electrical wholesalers were stuck in the "dead tree" v

of paper. Crum, along with Haluska, pushed members of the National Association of Electrical Distributors to work with representatives of the National Electrical Manufacturers Assn. The goal was to synchronize the manufacturers' with the distributors' so that errors in price and product identification would be wiped out. "We recognized the power of technology in our business relationships," Crum says.

In March, 1998, the industry's top executives met in Arlington, Va., and pl

PUTTING NEW ZING INTO AN OLD BUSINESS

IDxchange is a network linking about 225 manufacturers and distributors of electrical parts through a central database of prices and product data. Though it uses the open standards and technology of the Internet, IDxchange runs over a private network for better performance and security. Users are billed at a flat rate—not by the byte, as in older electronic trading systems—saving up to 50% off annual costs that used to be near \$500,000 for big companies. Here's how it works:



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Thomas & Betts CIO Haluska: He's helping to lead some 225 electrical-parts companies that are shaking off their antiquated ways and embracing Internet time

about \$5 million to construct IDxchange. They commissioned Triad Systems Corp. in Livermore, Calif., to build a database that would store information on hundreds of thousands of parts. With IDxchange, companies like Crum's will be hooked into the database and a point-and-click ordering system, eliminating the time-consuming task of typing in parts numbers. Today, for example, a light bulb has a single part number that identifies it consistently, not by whatever method each company prefers. "Until we talk apples to apples, electronic commerce can't take off," Haluska says.

Now it can. MCIWorldcom Inc. has built the network component of IDxchange. Companies connect using Internet access gear, ranging from sluggish 54Kb modems to speedy T1 lines. The member companies pay a flat monthly fee, from \$800 to \$2,900, depending on the size of the company and the speed of its connection.

The new system has persuaded some companies to abandon paper forever. Moeller Electric Corp., for example, had

been sending invoices and packing slips via snail mail. George Leonard, the company's manager of information systems and logistics, avoided moving documents electronically because the EDI system was too expensive. Now he figures the \$840 a month

"I don't think you go running through the door. You peek around the corner," says a skeptic.

he'll spend on IDxchange will beat paying someone to print an invoice, stuff the envelope, and lug bags of mail to the post office. "There's got to be money saved in that," Leonard says.

With their own private Internet, electrical manufacturers and distributors suddenly have the capability to operate at Net speed. The new network bypasses the clunky EDI network and allows companies to complete transactions in minutes. Connected via IDxchange, a distributor can now send an order at 9 a.m. and have it received by 9:03 a.m. Then, the order can be packed, shipped, and delivered the same

day. "That was an impossibility before," says Jeff Kernan, vice-president for information and technology at Lithonia Lighting Co., Conyers, Ga.

To add even more convenience, distributors are building Web sites where they give customers—contractors and others—a much higher level of service than in the past, if a plumbing contractor called a distributor's office to ask about a pipe fitting, the distributor either would refer him on to a pipemaker's Web site or he would browse for a part or, if that took too long, he would pick up the phone. "When you call, the person on the other end is in the bathroom," Crum says. IDxchange will eliminate all that. With the touch of a key, the computer will tell him a part's availability.

NOT FAR ENOUGH? Despite the advantages, IDxchange still has its skeptics. Some, especially, have fretted over having to invest in new equipment and ways of doing business. Joseph G. Schneider, president of Madison Electric Co. in Warren, Mich., supports the industry effort, but is not convinced that it will save his company money. Madison spends about \$10,000 a month for phone and data lines to connect his branch offices. Schneider worries that expense might not be eliminated, but he shells out some \$2,900 a month for IDxchange. So he's cautious about signing up for the service. "I don't think you go running through the door," he says. "You peek around the corner."

Or do you? For all its merits, there are some who say that IDxchange does not go far enough. For starters, it's not seen

buyers and sellers to haggle fast and efficiently. That bartering is still going on remains the province of the phone. Too bad, say Net futurists. John J. Sweeney, a digital strategist at Diamond Technology Partners Inc. in Chicago, says if IDxchange remains a kind of megacatalog ordering system, "that's a big thing, anything like an electronic market."

For now, the leaders of IDxchange are content to e-engineer their old-line business this far. After all, IDxchange does not take them well beyond paper and stamps—and past the frustrations of yesterday's poky old technologies. ●

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DAVID R

Why Office Depot Loves the Net

Its brick-and-mortar network is a big plus

Warehouses, stores, and inventory are all the kiss of death when it comes to Internet economics, right? If so, someone forgot to tell David I. Fuente, chairman of Office Depot Inc. Since getting into e-commerce nearly four years ago, Fuente has used

Office Depot's nationwide network of 750 superstores, 30 warehouses, and \$1.3 billion in goods to build the largest office-supply retailer on the Internet, with \$250 million in sales. And unlike high-flying Web-based companies that have yet to turn a profit, he gloats over the fact that Office Depot's Net business is in the black. "For us, this has been profitable from virtually the day we opened," says the 54-year-old Fuente.

As the Internet matures, it may be the old brick-and-mortar retailers like Office Depot that have the last laugh. But only if

they develop a Web strategy not unlike Office Depot, which is leveraging its strengths in terra firma for success in cyberspace. The necessary ingredients: a solid brand name, extensive local distribution, and hefty purchasing power to match—or even undercut—discount-minded cyber-rivals. "If the traditional retailers would only wake up and use their stores and distribution power, it would be a phenomenal opportunity," says PaineWebber Inc. retailing analyst Aram Rubinson.

Office Depot is a case study in how to

avoid being Amazoned. The Delray Beach (Fla.) company is tightly integrating the Internet into the heart of its operations. Focused primarily on business-to-business, it has set up customized Web pages for 37,000 corporate clients, including Procter & Gamble Co. and MCI WorldCom Inc. For each customer, Depot has designed a site with e-mail meters that allow different employees

"For us, this has been profitable from virtually the day we opened," says Chairman Fuente

degrees of freedom to buy supplies: A warehouse room clerk might be able to order paper, and toner cartridges, while the CEO has carte blanche to order everything the company sells.

Customers also can use the Internet to check up-to-the-minute inventory at the nearest store or warehouse to see what's available for delivery the next day. "Office Depot seems to really get it," says John Martin, chairman of the Net Future Institute, a New Hampshire think tank that studies e-commerce. "Rather than just tending their business to the Net, they used it to leverage their bricks and mortar."

There's a sweet financial incentive in doing it: Electronic sales cost less than those made in stores or from catalogs. Processing an order taken over the Web costs Depot less than \$1 per \$100 of goods sold, vs. twice that for phone orders, since no customer-service representative has to key in the transaction, order errors are virtually eliminated and returns are cut in half. The Web now accounts for some 20% of Depot's sales to corporations—and the company aims to raise that to 30% by yearend. That would help explain why, last month, the company told analysts that its second-half earnings would come in at least 20% below the Street's estimate, primarily because of rising inventories of outdated office-technology products and the costs of closing underperforming stores.

Office Depot isn't the only one winning by moving to the Web—so, too, are its customers. The Depot's Web operation helps corporate clients reduce their



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for costly purchase orders since billing is handled electronically. While the average order for supplies is about \$125 at Office Depot, many customers report costs of more than \$100 to simply process a purchase order and pay an invoice. Using the Web, that can be slashed to \$15 to \$25. "We went to Office Depot primarily because of their Web systems, which translated to greater efficiency in ordering," says Urban Sommer, director of procurement at MCI WorldCom. The phone company has seen its \$3.5 million annual bill for office supplies shaved by more than 10%.

To be sure, Office Depot isn't the only seller of office supplies on the Net. Staples Inc. in Framingham, Mass., has a site that many experts believe rivals Depot's—and even has certain advantages, such as a part-

chase order, and pay an invoice. Yet they could still have the item the very next day or sooner," says Diane Devlin, who led the MIT team developing the operation.

Depot won the contract and opened the system in January, 1996. Soon, MIT had rid itself of five stockrooms and a warehouse, allowing redeployment of much of the \$1.2 million it had tied up in inventory. And through the Office Depot initiative and other Internet-ordering systems, MIT has reduced employment in its procurement department by roughly half.

Since Office Depot started building similar sites for corporate clients in the autumn of 1996, it has found that the cost of operating on the Web is minuscule compared to the benefits. Because Depot built its Net business on an existing network

With its site for big companies thriving, Office Depot is turning its attention to small business

nership with Register.com, a Web site that lets businesses sign up for Net domain names. The third player in the real-world office supply business, Office Max Inc. of Shaker Heights, Ohio, was first to the Web, beating Office Depot by a year. But thanks to Depot's sophisticated approach, it's leading the pack with Web sales that are 25% higher than Staples' \$200 million. Office Max doesn't report its Web revenues, but concedes its sales are smaller than the other two. "Depot has done the best job, hands down," analyst Robinson says.

SMART FRIENDS. Together, the three have occupied the Web early and forcefully enough to neutralize any serious threat from Internet startups, such as At Your Office.com and Online Office Supplies.com. Consider this: Online Office Supplies started operating a year ago and has logged less than \$1 million in sales. Anybody would "have a difficult time becoming the Amazon of office supplies," says Paula Jagemann, CEO of Online Office Supplies.com.

Office Depot can credit smart friends for its success. Its push into e-commerce began at the behest of one of the more tech-savvy institutions: the Massachusetts Institute of Technology. The school was looking to ditch an archaic system of requisitioning office supplies from campus stockrooms and outside vendors. "We wanted the school community to use the Internet in a way that would eliminate having to make a call, generate a pur-

chase order, and pay an invoice. Yet they could still have the item the very next day or sooner," says Diane Devlin, who led the MIT team developing the operation.

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Now, Office Depot is turning its attention to a public Web site for small businesses and consumers. Individuals can order any of the company's products. Small companies get a poor man's version of the big corporate sites. For example, each visitor can set up lists of authorized users with the ability to purchase specific types of supplies or goods up to a certain dollar value. A company can also authorize a lower-level worker to place orders that will only be submitted after a supervisor, who is notified by e-mail, approves them. The site is catching on: It attracted more than 800,000 visitors in July.

Even though Depot's Net operations are growing 50% per quarter, Fuente believes they will not displace the company's traditional business anytime soon. Even now, the Web accounts for only 3% of the company's total revenues. Besides, he knows how critical brick-and-mortar assets like warehouses are to Depot's Internet future.

—Contributing: Peter Galuszka

OFFICE DEPOT'S E-STRATEGY

HOW IT BENEFITS OFFICE DEPOT:

Cuts in half the cost of processing an order.

Typically, it costs about \$2 to process a \$100 phone order, but over the years that drops to less than \$1.

Wins new customers.

Consumers who weren't close to an Office Depot store can now use the company's Web site to order goods.

Keeps customers.

Those that might defect to online competitors can now stick with Office Depot. Less than 1% of sales in the \$1 billion office-supply market are generated by Web-only companies.

HOW IT BENEFITS OFFICE DEPOT'S CUSTOMERS:

Reduces the cost of purchasing goods.

Corporations spend \$75 to \$175 to issue a purchase order for an item and then pay for it. The cost slices that to \$15 to \$25.

Businesspeople can place orders from their chairs.

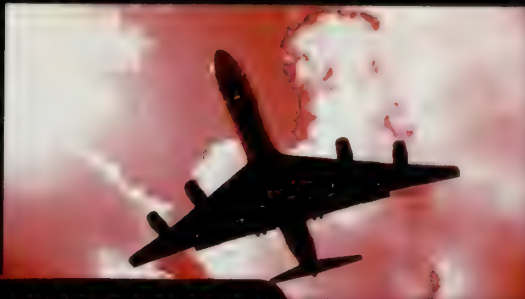
Customers tell Office Depot that ordering over the Net reduces phone calls to the purchasing department by 60%.

Provides a peek into Office Depot's inventory.

Why is that important? If you have a presentation tomorrow, you may want to know whether Office Depot has purple binders on hand.

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MICHAEL MOEL

core to the Internet," says Peterschmidt.

For now, though, his company is one of the Net's best-kept secrets. That's because Inktoni operates behind the scenes—supplying Web sites with top-of-the-line software in four product areas: search engines, directories, comparison shopping services, and speeding Web-page delivery.

The company's low profile conceals an astonishing fact, however. While most startups feared Microsoft's dominance would mean the toll collector of the Net, that could instead become upstart Inktoni's opportunity on a creative lot. When someone searches for

Founders Gauthier and Brewer: They started out to prove that desktops could match a supercomputer's processing power

on any of the 50 million Web sites that rely on Inktoni's software, the company collects a fee around a half-cent per Web page retrieved. And when Netizen stops looking at one of 20 sites that

Inktoni's new comparison shopping service—such as J. Crew or Barnes & Noble—Inktoni and its Web portal partner collect commissions, ranging from 5% to 20%. **ROSY FUTURE.** It's a Net goldmine in the making. The company is on track to pull up \$68 million in sales this year, more than double its 1998 revenues. Analysts expect sales will again nearly double to \$130 million in 2000—when they believe the company will become profitable. Inktoni's stock price has risen from \$30 a year ago to \$130 today. "Inktoni is in a great position," says analyst Michael A. Parekh of Goldman Sachs. "Their products are in areas that are key to the future of the Internet." All indications are that demand for its technology will increase for years to come.

Indeed, if Inktoni continues to live up to its potential, it might start to look more like Microsoft. It's even trying to emulate the software giant's strategy. The company's Microsoft success is its Windows operating system, for which other software makers have developed thousands of software programs. Inktoni is attempting to create a similar software "platform" with technology for delivering Web pages ultra-fast—much faster than up software makers that are using it

A Hidden Goldmine Called Inktoni

The Web site supplier could be the Net's toll collector

Three years ago, it was a hard-knock world for Inktoni Corp. The startup set out with grand plans to become as important to the Internet as Microsoft Corp. was to the PC. But its beginnings were anything but regal. The company's six employees were crammed into a 1,200-square-foot of-

fice that they could only reach by stepping over homeless people congregating in front of the door. Their conference room was just big enough for a card table and four fold-up chairs—and its porthole-size window peeked out into an elevator shaft.

How times have changed. This month, Inktoni will move into its spiffy new digs—two 100,000-square-foot buildings with breathtaking views of the San Francisco Bay. The company's market cap is

\$5.5 billion—five times that of Sybase Inc., the onetime software highflier that Inktoni CEO David C. Peterschmidt once led. Its customer list includes such Net heavyweights as Yahoo!, NBC, America Online, and Excite@Home—making it the world's No. 1 search-technology provider. And it's rapidly expanding into promising new markets—like e-commerce. "I want to make sure that when all is said and done, Inktoni will be a company that is

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prove the performance of their products.

But Inktomi isn't home free yet. While no one competes against its entire range of products, the company's offerings are being attacked on all sides—from networking powerhouse Cisco Systems Inc. to whizzy search engine startup Google Inc. Compounding the problem: While Inktomi made its name in search, its other services are less well known, making its expansion into new markets more difficult. And, longer-term, Inktomi faces an even bigger hurdle: Its continued success relies on its ability to solve some of the Internet's biggest

this far based on whizzy technology alone. Its founders realized immediately that they would need management help. Six months later, Peterschmidt, the CEO who oversaw database software maker Sybase's growth from \$60 million to \$1 billion in six years, came on board. At Sybase, Peterschmidt had beefed up the sales force and targeted new markets such as the financial-services industry. From the beginning at Inktomi, he had expansion on his mind. The day he arrived, he asked the company's 13 employees how they could use their technology in new ways. The answer: Caching, the Net

Luckily for Peterschmidt, there's in sight when it comes to demand for more powerful search capabilities. The number of publicly accessible Web pages is expected to grow from 800 million today to 8 billion by 2002, according to research firm International Data Corp. To deal with the tsunami of data, Inktomi this summer introduced a new directory of Web pages called the Inktomi Directory Engine, designed to help speed and improve the accuracy of searches.

WAKE-UP CALL. With the explosive growth in the number of Web pages, though, it's no surprise that new search-engine companies are intent on stealing some of Inktomi's lucre. Earlier this year, Inktomi received a major wake-up call when its first customer, the HotBot Web site, announced it was adding a second search service from Direct Hit Inc., a year-old Wellesley (Mass.) company. The reason? While Inktomi is considered good at getting results from complex queries, Direct Hit's analysis of many similar searches improves the relevance of search results. According to market researcher Media Metrix, 53% of all searches now use Direct Hit's technology in addition to traditional search engines.

Now comes Google, a new search technology provider that claims its search is faster and more accurate than Inktomi's. "We think that there is a lot of room for innovation in the world of search," says Larry Page, co-founder of Google, which is based in Mountain View, Calif. Google has raised \$25 million from backers, including the influential Kleiner Perkins Caufield & Byers.

Inktomi isn't running scared. It's been continually beefing up its search technology. And with the competition in the market heating up, Peterschmidt's diversification push is starting to look smart, indeed. Last year, the company introduced



Horseplay in the hallways at Inktomi: CEO Peterschmidt likes to call the company "arms merchants" because it provides the essential technology to do battle on the Web

technical challenges, like making the Net as reliable as the telephone.

Fortunately for Inktomi and its shareholders, innovation has always been the company's strong suit. The company was founded by Eric A. Brewer and Paul Gauthier, then computer scientists at the University of California at Berkeley. Under a federally funded project, Brewer was trying to prove his PhD thesis—that inexpensive desktop computers wired together could match the sheer data processing power of one pricey supercomputer. To test the computer system, Brewer and Gauthier, a grad student at the time, created a Web search engine, software that sifts through millions of Web pages to quickly retrieve information. The search technology worked so well that they decided to quit academe and start a company.

Inktomi, a Native American word meaning "clever spider," could never have gotten

speed-up technology. Peterschmidt set an engineering team to work on it the day they finished the search engine.

Peterschmidt's other crucial move was strategic. Search companies like Excite and Lycos decided to mimic Yahoo and become Web directories and, ultimately, gateways to the Web. But rather than turn Inktomi

The number of public Web pages could grow to 8 billion by 2002, so search is a growth business

into yet another Yahoo copycat, Peterschmidt positioned it as a behind-the-scenes provider of essential technology that all of the major Web sites needed. "We are arms merchants," says Peterschmidt. That approach has paid off handsomely for Inktomi. By not competing with its potential customers, the company has avoided conflicts, enabling it to sell its products to the fiercest of rivals, like Yahoo and AOL.

Traffic Server software, which lets Internet service providers (ISPs) store often-used Web pages on computers scattered around the world where they're just a quick hop from consumers' screens—a practice called caching. Already, more than a half-dozen companies have signed on, including video leader Real Networks Inc.

Caching radically improves the performance of Web sites. For Excite@

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a plu-ri-bus u-num (Latin)

unum

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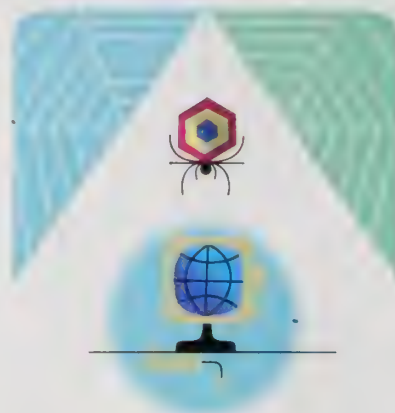
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which is using Inktomi's software, at least half of the traffic running on the network doesn't have to travel across the Internet backbone, says Milo Medin, Excite@Home's chief technology officer. On a busy day, that can shave crucial seconds off the time it takes for a viewer to see a Web page.

TROJAN HORSE. Unfortunately for Inktomi, this market is under attack from competitors, too. And they're the giants like Cisco Systems and Novell Inc., which tower over Inktomi in size and resources. The market for caching is now about \$100 million and is expected to grow to \$1.6 billion by the year 2002, according to the Internet Research Group. So chances are Inktomi will have more adversaries in the future. Even Microsoft is expected to add some basic caching capabilities to its Web server software, something that it bundles for free with Windows NT software.

Wary of all the competitive threats, Peterschmidt is hoping to improve Inktomi's prospects by targeting new kinds of customers—not just the large ISPs and mega-portals. Recently, he has inked deals with dozens of smaller, niche players like music site kadoo.com, set to launch in



October. The rationale, say Inktomi executives, is that because the search technology is so flexible, it can be tailored for specialized searches. A music site like kadoo.com can get a search engine designed by Inktomi to filter out any unrelated Web pages. A search for the rock group REM, for instance, wouldn't return any pages related to dreaming and rapid eye movement, also known as REM.

Peterschmidt's hope is that search is the Trojan horse that gets Inktomi's foot in the door of new customers—making it easier to sell them the rest of the company's portfo-

lio of products. Especially promising market are the new shopping service technology that helps sites build and maintain their own Web site directories. For example, when someone does a search on a site focused on backpacking, not only can the search engine deliver a long list of pages based on the key words used, but it could also dish up a list of backpack merchants, plus a directory of related sites or subjects.

The way the Net is expanding, the end in demand for the basic plumbing that Inktomi supplies. The question is: How quickly can it expand into new markets? For its founders, the answer has been dizzying. "When you hire for a job, especially in the early days, you sell a bill of goods and a promise," Brewster Peterschmidt says. "Then you have the on-going business of making that vision come true." Brewster Peterschmidt have kept their promise. And they no longer stumble over how to get people when they go to work. Now they just have to worry about tripping themselves as they race to capitalize on what may be some of the sweetest spots on the Web. ●

INKTOMI...GETTING MONEY FROM CLICKS AND CACHES

Inktomi's revenues could jump fourfold between 1998 and 2000 if its new products live up to their billing. Here's how:

FISCAL YEAR
1998 1999+ 2000
Revenue (in millions)

INKTOMI'S TRAFFIC SERVER: Now Inktomi's biggest moneymaker, Traffic Server is software sold at a starting price of \$24,000. The software, licensed by nearly 100 companies, allows Internet service providers such as America Online and Excite@Home to speed up the delivery of content over the Internet by caching, or storing, frequently requested Web pages or sites in their high-speed computers. That way they can be dished up instantly.

\$8 \$40.3 \$

SEARCH: If you thought that Yahoo and AOL delivered what you needed based solely on their own homegrown search capabilities, think again. Operating behind the scenes is Inktomi's search service. Sold to more than 50 companies and portals, Inktomi generates revenue by charging every time it returns a page requested by a search query.

\$12.5 \$25.2 \$

SHOPPING: About 20 Web sites offer Inktomi's new shopping service, which allows Web surfers to compare the products of 350 merchants that have partnerships with Inktomi, including J. Crew and Barnes & Noble. When customers buy something found through the shopping service, Inktomi takes a percentage of the sale from the merchant and splits the money with the portal. Inktomi plans to add auctions, local merchants, and classified advertising to this service.

\$0 \$1.8 \$

DIRECTORY: A new portal service launched this summer, Inktomi Directory Engine builds off its popular search to provide portals with neatly packaged subject categories. The directory, for example, will let customer GoTo.com offer cybersurfers categories of information, like health, rather than just bits of information. Inktomi charges the portal every time it serves up a page. So far, it's signed up seven clients, including Knight Ridder.

\$0 \$1 \$

+ Revenue estimates

DATA: Bear, Stearns & Co. Inc.



We had a one-eighteen in progress. Missing inventory. When we arrived at the scene, the proprietors reported more unusual activity: higher margins, increased inventory turns, and faster,

less expensive ways to acquire products and services. The only evidence? The word "Moai." It's still hard to believe, even for a seasoned law enforcement veteran such as myself.



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'Just Another Medium'

iQVC says there is nothing special about the Net. Customer service is still key

When Internet mavens think of qvc, they may think about cubic zirconia or stretchy tunics peddled by Cheryl Tiegs. What probably doesn't come to mind is that many online merchants are eating QVC's cyberdust. Forget that dowdy image: QVC's Internet

site, dubbed iQVC, has some of the happiest Web customers around. According to Harris Interactive's ecommercePulse survey of consumers using 180 e-stores, iQVC posts customer service scores of up to a chart-busting 9.5 on a scale of 10. Sales at three-year old iQVC, a subsidiary of Comcast Corp., will approach \$100 million this year. "They are the poster child for how to transfer an offline audience to an online audience," says Harris Interactive Vice-President Benjamin D. Black.

KEEP 'EM HAPPY. It's all about taking a low-tech approach. iQVC fills orders fast, answers e-mail when it comes in, and makes shoppers feel comfortable with goods they haven't touched. The key may be that iQVC steers clear of technology that could make its less Net-savvy audience uncomfortable. "We were in e-commerce with TV," explains Steve Hamlin, a QVC vice-president

who runs iQVC. "The Internet is just another medium."

The first rule of retailing is still: Know your customer, Hamlin says. About 70% of shoppers on both iQVC and QVC are women. So iQVC added special tools to help them. A big one: a feature called My Style Advisor that recommends clothes and makeup after women tell iQVC about their coloring, weight, and style. Says David Cooperstein, Forrester Research

iQVC's Hamlin: A low-tech approach helps relax the less Net-savvy customers



Inc.'s director of consumer e-commerce search: "They know how to handle customers who can't actually touch the product."

That's about as geeky as iQVC gets. The company shuns technology that doesn't appeal to its audience. For example, its computer interface doesn't let consumers configure their PCs, a feature nearly universal elsewhere.

Another taboo: video that can strain a slow Web connection.

Hamlin: "People want a smooth shopping experience. It has to be smooth all the way through."

It's the little things that make a difference that way. The site sells a wide range of items—including 30,000 different products. The channel doesn't just sell; it also puts extra effort into prosaic tasks such as making packages show up on time. About 70% of iQVC's

orders come from QVC's three distribution centers around the U.S. But to make sure other shipments meet iQVC's standards, Hamlin's team manages hundreds of partnerships with distributors and manufacturers. The result: about 95% of combined QVC and iQVC orders are shipped within 48 hours.

Another way iQVC puts customers at ease is giving their e-mail top priority. Customers who zip off messages to iQVC get a response, on average, within four hours. A recent survey by Yankee Group Research Inc. found that on a weekend, less than 30% of leading e-commerce sites respond within 24 hours.

Taking care of customers isn't revolutionary. But for entrepreneurs who think e-commerce is mostly about technology, iQVC's happy customers may serve as a wake-up call. ●

GETTING RESPECT FROM THE PEOPLE WHO COUNT

iQVC, the online arm of the QVC cable shopping channel, ranked No. 1 in customer satisfaction in a survey of 100,000 Web shoppers this spring. Here's how iQVC stacked up in key segments, on a scale of 1 to 10:

COMPUTERS		TOYS		CLOTHING	
iQVC	8.10	iQVC	8.76	iQVC	8.30
APPLE	8.08	BARBIE	8.42	DISNEY	8.27
DELL	8.00	ABC DISTRIBUTING	8.31	LANDS' END	8.14
HEALTH/BEAUTY		ELECTRONICS			
PURITAN	8.59	EGIFT	8.45		
iQVC	8.39	iQVC	8.39		
MOTHER NATURE	8.33	CRUTCHFIELD	8.02		

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Building the Perfect Shareholder

TIMOTHY J. MULLA

IPO issuers want to use the Net to weed out stock-flippers

Internet investment banks have a problem, and its name, at least symbolically, is Mark L. Walsh. The CEO of Web publisher VerticalNet Inc. has a tart assessment of the shareholders most likely to be drawn to initial public offerings over the Web: "Ralph from a trading room in Detroit," he sneers. Like many other CEOs, he

worries that he could end up with fast-trading shareholders who would handicap his efforts to build a company by slamming his stock around like a Ping-Pong ball.

So backers of e-IPOs are beginning to develop a fascinating new twist to their pitch: Use the Net to build the perfect shareholder. Advocates say Net banks can take advantage of the unique characteristics of the Web to match specific people to stocks they're likely to hold for the long term—just as Amazon.com Inc. can use information about old book purchases to recommend summer reading. "We're trying to find the person with a natural reason to hold the stock," says Daniel H. Case III, CEO of San Francisco investment bank Hambrecht & Quist.

So far, proponents are taking only the most basic steps toward building the perfect shareholder. Hambrecht and online investment bank Wit Capital Group Inc. weed out "flippers"—those who sell shares days after an IPO—by refusing to let them buy stock in other IPOs for 60 days or so. Net banks also target an issuer's customers and partners. For example, Hambrecht sold shares in the music site MP3.com to musicians whose work is available on the site. And Wit used a mailing list from Physicians Online Inc. to pitch a medical company's IPO. "Creating a relevant shareholder base is Wit's whole proposition," says Susan Berkowitz, Wit's senior vice-president for marketing.

Whether these early efforts will be suc-

cessful is still uncertain. Case figures that Hambrecht & Quist can get 10% more money for companies going public by using the Net to find individual shareholders willing to pay top dollar for a certain company's stock. But it's not at all clear that Net banks are getting more loyal shareholders. Even though Wit requires clients to hold shares they buy for at least 60 days, 18% don't comply with the rule.

To find shareholders more loyal than that, Net banks have to move beyond the

basics. What E*Offering, Hambrecht and others want to do is use sophisticated data mining to match investors and stock issues. For example, an investment bank preparing an IPO for a PC manufacturer could go through its retail brokerage accounts to pluck the 60-year-old Iowa woman who loves PC makers and has never sold a share in such companies. That kind of data mining is the competitive advantage of traditional banks such as Salomon Smith Barney, which would have the hardest time matching investors to the e-IPO firms aren't using it yet—because they're worried about a backlash over privacy.

FAT AND HAPPY. Such privacy concerns are surmountable. Georgetown University business professor Mary Jo White says that consumers typically won't object to such data-mining techniques if they're convinced they're getting something valuable in return while for surrendering personal information. In this case, the payoff means persuading them they'll get more if it if Net banks like E*Offering help them pick stocks.

The technology for such data-mining also needs refinement. Most difficult is successful database marketing requires that you understand the patterns that connect different kinds of financial decisions. That's particularly true since IPO returns can be volatile enough to change people's habits. "We haven't made a trade in 12 months," says University of California business professor Todd H. Huxford. "But if I had an IPO with a 10% return in one day, I can't tell you I wouldn't sell it."

The biggest reason this e-IPO revolution hasn't hit, however, may be that the would-be revolutionaries are a little too fat and happy. Through Labor Day, the \$1.5 billion raised in IPOs this year was up from the same time last year. With so much business to go around, the new investment banks have been sharing with traditional banks more than competing against them. Aggressive moves to change stock market writing may have to wait for a market where there's not quite so much business to go around. ●



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Corporate
Services

A New Way to Get Your Foot in the Portal

HEATHER G

Startups can get access to a powerful portal's customers—in exchange for equity

Earlier this year, Scott Randall, the founder and chief executive of FairMarket Inc., was struggling to get his two-year-old company noticed. FairMarket, which operates auctions for other Web sites, needed to kick-start the company. In May, Randall got what he wanted: He cut a deal with

Lycos Inc. to become the auction house for the portal, which attracts 30 million visitors monthly. In exchange, he's giving Lycos a split of his revenues as well as warrants that can be converted into as much as 9% of the startup's stock. Randall says sacrificing equity was worth it. "It clearly established us as the leader in the private-label auctions," he says.

This is what financing is coming to in the Internet Economy. Big portals like Lycos are wielding so much clout that they're able to cut something-for-nothing deals in which they trade access to their huge customer bases for equity stakes in startups. It's barter venture capitalism—where eyeballs are worth more than dollars. "Everyone on the Web is looking for traffic, but not many have it," says Edward M. Philip, Lycos' chief financial officer. "If we can funnel traffic to a service or a technology, we can build them into a success overnight." The deals are similar to those cut by TV networks. NBC, for example, has taken a stake in women's site iVillage in exchange for TV exposure.

The portal deals can be worthwhile for both sides. Cash-poor startups with competitors on every side get the chance to distinguish themselves by basking in a portal's spotlight. The portals get the startup's content and services—which makes their sites more appealing—and a chunk of po-



tentially lucrative stock. "It's much less risky for portals to do this than if they do a cash investment," says analyst Henry Blodget of Merrill Lynch & Co. "And it's much easier for the startup to make the deal, since equity is a lot cheaper than cash."

Lycos is one of the most aggressive portals

in its something-for-nothing quest. In the six deals it has cut so far, the company took warrants or stock for up to 15% of the startups instead of the usual advertising fees. Besides FairMarket, it has undisclosed equity interests in Web software developer NeoPlanet and Student Advantage, which dishes up content and discussion groups for college students.

COLD CASH. Portals Excite@Home Corp. and America Online Inc. have a slightly different approach. Both take smaller equity stakes in the startups but insist on getting paid some cash when those companies run advertising on their sites. That way, the portals get some value from the relationship even if the smaller companies go belly-up. "There is always a big cash component," says J. Michael Kelly, AOL's chief financial officer. Excite has racked up about 30 deals so far in which it typically gets warrants for 5% to 10% of a startup's equity. It plans to sign up an additional dozen or so per quarter. AOL won't say how many stakes it has. A handful have been disclosed publicly, including its

PORTAL POWER

Major Web sites have the muscle to get equity stakes in hot Net companies without paying any cash.

LYCOS

The portal has taken equity stakes in six companies so far in exchange for exposure on the Lycos site.

The stock holdings range from 5% to 15% and include companies such as auction systems provider FairMarket.

EXCITE@HOME

Excite has taken warrants in about a dozen companies that advertise on its site, including Net escrow provider BillGuard Inc. It plans to add stakes in about a dozen companies per quarter. The warrants typically are convertible into equity stakes of 5% to 10%.

AOL

The monster portal also takes warrants in companies that pay to advertise on its service, such as EMusic.com.

stake in EMusic.com Inc., which sells digital music that can be downloaded from the Net.

Such deals are just part of the investment tactics. All three also invest in startups. "The bottom line for all the portals is that, by spreading these chips around the table, they have a diversified business and set of investment opportunities," analyst Chris Charron of Forrester Research Inc. And in the volatile world of the Internet, hedging your bets makes a lot of sense.

—Contributing: Paul C. Judge in

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IPOs! Hot Tips! Get the Real Lowdown!

TIMOTHY J. MULLA

You'd think the Net would be a great place to do just that. Not necessarily

On the face of it, no medium should cover the market for initial public offerings better than the Internet. The IPO market is fast, and so is the Net. Web sites can chronicle change almost as quickly as it happens. And because the Web lets people act on information

as soon as they get it, investors can go right out and trade, grabbing some of that dot.com dough for No. 1. Sounds good. So why are so many IPO sites so bad?

Three of the Web's best-known IPO sites—IPO.com, IPOMaven.com, and Renaissance Capital Corp.'s IPOhome.com (known until a redesign this month as TheIPOsite.com)—are a reminder that new media could use a dose of old-media values such as objectivity and independent judgment. IPO.com and IPOMaven don't work because they seem more determined to cheerlead for the market than explain it. Of these three, IPOhome is best, because it comes closest to offering the blend of information, online community, and trading that can let people unlock the Internet's potential. As I tried to imagine using the other sites to guide my investing, I thought to myself, no wonder day traders lose so much money.

GLARING DEFECT. Old-media virtues would have been especially useful last month, when at least a dozen deals were delayed as the IPO market tanked. It was a time for hard thinking and quick execution. Instead, two of these three sites weren't up to the challenge. The most glaring defect of IPO.com and IPOMaven is that their news and commentary are updated only once a day, or even less—which means they fail to exploit their ability to always provide the freshest information. These sites also have little or no trading capability, so they fritter

away their e-commerce advantage. And they don't let people easily share information through chat or bulletin boards, improving on what they read on the Web or elsewhere.

IPO.com (which provides IPO-related content to Business Week Online) falls the farthest from the mark. During a tumultuous August, the site provided weekly commentaries and not a whole lot more. From Aug. 11 to Aug. 30, it posted just a handful of news headlines—and

nearly nothing useful about specific IPOs. Instead, IPO.com dished up commentaries such as this one, on Aug. 5: "The sky is falling, IPO fans, it's simply deciding what kind of sky it wants to be when it rains." The headline on that piece of news bears as Chicken Littles.

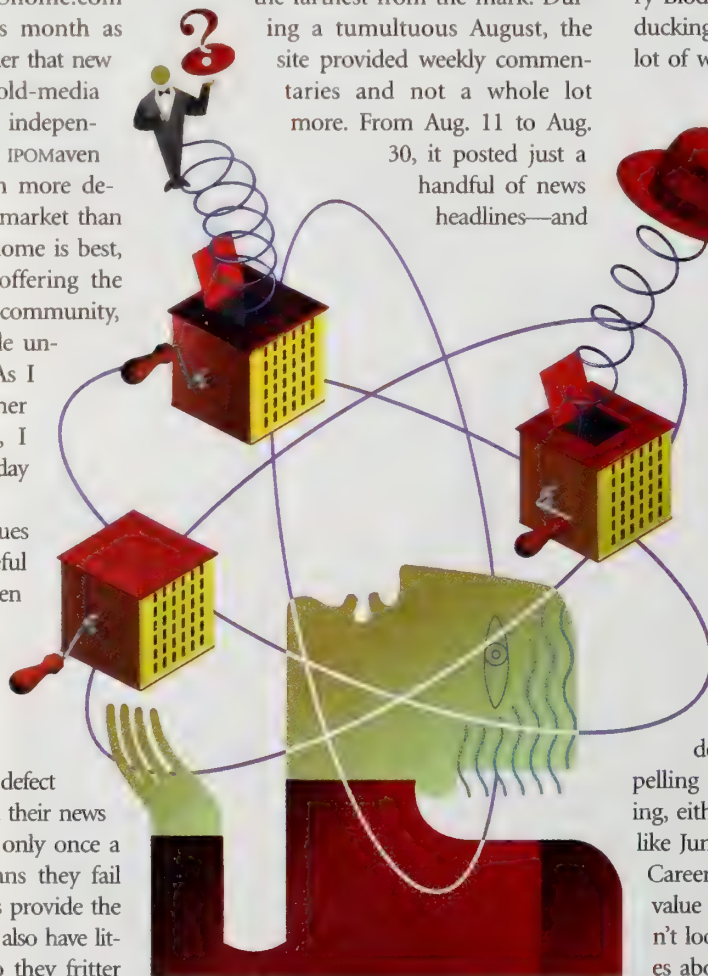
Now here's one for the dubious distinction file: IPO.com found it harder to be plainspoken about August's market than the stockbrokers did. On Aug. 4, I had a conversation with Merrill Lynch & Co. One speaker was a star Internet analyst (and noted bull market bear) Blodget, who joked ruefully that he was ducking rocks those days. He added that a lot of weaker Web companies would

not come back strongly.

August's correction was a point: A chilly market doesn't mean that IPOs should be thrown out with the bathwater. But he also meant it's

ways a good time to buy and sell strong market fundamentals. It's not to make every stock a bargain. Merrill can admit it, IPO.com should, too.

IPOMaven looks better, with a wealth of links to things like IPO interviews and breakdowns of IPO deals, but much of its information is shockingly old. For example, in early September, ipomaven.com's list of 10 "IPOs to Watch" featured companies that were public between March and June. IPO deals highlighted weren't all so promising, either: They ran the gamut from the like Juniper Networks Inc. to laggard CareerBuilder Inc., which has lost value since the day of its May IPO. It doesn't look like someone made smart decisions about culling the best deals. It





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Clearing Up Web-Site Clutter

JOAN O'C.HAMIL

Sports site CNNSI.com is redesigning to combat a common woe: Too much "stuff"

From the minute CNNSI.com went online two years ago, Managing Editor Steve Robinson had a mission that seemed made in media heaven: To become the Internet's be-all of sports coverage. And why not? Behind it was the combined clout of the Cable

News Network Inc. TV powerhouse and *Sports Illustrated's* crackerjack writers and photography. Like Jeff Gordon barreling down the home stretch, Robinson's team tried to gain on cyber rivals ESPN.com and Sportsline USA Inc. by putting the content pedal to the metal. In 24 months, CNNSI.com's goodies quintupled, to more than half a million Web pages—everything from breaking sports news to stats on every player who ever played major league baseball.

But CNNSI.com also developed an increasingly common problem: In the midst of adding all this material, its design went bad. Over time, CNNSI became so packed with links, new sections, and graphics that it actually became too hard to find something as simple as the score of last night's ball game. Then it got worse. Robinson's team tried to make new graphic elements

eye-catching enough to stand out from the site's clutter, but the opposite happened: Surfers ignored them, thinking they were ads. "We started piling on elements without going: 'Wait a minute folks, we're going to confuse people,'" he remembers. "And once we'd put stuff on, we were afraid to take stuff off."

Pay attention to what happened at CNNSI.com, because it's happening all over the Web. ESPN, for example, launched a new design in September. In fact, many sites are

with just a couple of intuitive clicks. "It's an illusion that we have all the space the word to deal with. But there are limits to what you can do on a page, even on a Web site. At a certain point, you have to clean up," says Web designer and author Jeff Fleming of Somerville, Mass.'s Square Solutions.

Conceding that you have a problem, though, is the first step to fixing it. Just before the football season, CNNSI.com was pulling the warmup suit off a site redesign that tries to clean up the clutter. Robinson agreed to a Monday-morning quartering session with e.biz to give us an inside look at how the design of the old site went wrong and to preview the new design. www.ebiz.businessweek.com, you'll find an exclusive sneak preview of the look s

CNNSI's site became so complicated that visitors had trouble finding the scores of last night's game

staggering under the sheer volume of "stuff." There isn't a reason to limit the amount of content—chances are every bit of it appeals to somebody—but it gets harder and harder to get Netizens to their destinations

uled to go live by Sept. 27, as well as graphics that illustrate some specific changes.

The No.1 priority, Robinson explains, is to make sure the site's four main components are distinct and distinguishable—its content, and scores, navigation elements, internal links, and advertising. Some structural and graphic layout changes will make page loads faster. More important, the once-overhaul will help give visitors more of the most interesting sports news. That's what Robinson's team has realized that its visitors want most.

The overhaul began early this year. For online sports, a diverse fan base expects more variety and doesn't necessarily agree with what editors think is the day's top news story. "Fans want to connect with their favorite sports even during the off-season," says Robinson. "They may be stat hounds who play fantasy games. The trick is to make whatever information seems easy to find."

As editors tried to accommodate

FOR HELP CLICK HERE

In the beginning, it was all so simple: A few lines of funky-looking HTML code in a text file turned on a light in your entrepreneurial soul. Soon you were adding features and content like crazy.

But whether you're CNN/*Sports Illustrated* or a local hobby store, it doesn't take long for your Web site to experience the cyberequivalent of urban sprawl. When that happens, you need a makeover. But where to begin?

With U.S. BUSINESS WEEK e.biz has asked a panel of Web-design experts to help us help you. If you think your site could use an overhaul, send us your URL, your business goals, and some details about your problem as you see it. Is your traffic declining? Are your customers confused? Are your downloads poky? If your site is chosen, our panelists will offer a critique and suggestions. We'll feature our reviews and makeovers on our online site (ebiz.businessweek.com). For more details, E-mail us at webdesign@businessweek.com.

The background of the advertisement is a photograph of a man in a light blue shirt and khaki pants standing in a warehouse aisle, looking at a handheld device. The warehouse shelves are filled with various toys, including a blue toy train in the foreground. A large circular inset in the upper right corner shows a landscape with a winding road and hills under a blue sky.

The horizon widens

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CNN's home page began to look as crammed as pants from 10 pounds ago. A long and unwieldy index box on the left side of CNN's home page, for example, was followed by a couple of dozen links for everything from fantasy leagues to free e-mail—much of it in type so tiny that the choices were hard to sort through. Even the site's own logo became lost under a box with internal promotions and sat beneath a banner ad across the top that was far more eye-catching. The result: It could take new arrivals a few seconds to actually be sure they'd arrived at CNN.com.

Perhaps more critically, the site's design blurred the line between editorial content and advertising. Page designers created arresting graphics for editorial features that ran above the news headlines on the front page's right rail. But thanks to garish colors and type styles, they ended up creating boxes that looked to many visitors like ads. CNN Interactive Coordinating Producer Joey Trotz says focus-group sessions unearthed some sobering data: Even when those boxes contained information users specifically were looking

for—say, the scores of last night's game—people would simply not register that they were seeing it. They had trained themselves to avoid ads.

In the new design, Robinson has limited the colors and given these special features the same style and graphics as the CNN.com logo. They're now promoted just as aggressively but are better associated with the site's own style and editorial offerings.

Web design is only partly about graphics and visual appeal. For a site to really work, say experts, designers must envision the logical associations users will make—not just deliver splashy art for art's sake. That's one reason a whole new specialty of "information architects" now focuses on clear organization. They visualize how users will "navigate" through sites, much as real-world architects focus on things like where hallways should be to make traffic flow through a building smoothly. They work with accepted principles, such as data about where the eye tends to travel first on a page (to photographs and the upper-right-hand side) and create different user sce-

narios—then test them. "If [a site's architecture] is done really well, you see it. If it's done poorly, it drives you sane," says Peter Morville, chief officer of Argus Associates, an Ann Arbor (Mich.) information-architecture firm.

Beyond just organization, another the CNN.com news team decided it to do was pump up the news value of the site. Although it got 1.6 million impressions in July, according to Metrix, it's still a distant third to ESPN's Sportsline. By connecting the site's promotions to the logo bar, Robinson can pull at least four or five news stories over on the page. In another key change, the area below the featured story in the "Inside Game" stories that give readers insights on timely topics.

The best Web designs demonstrate a keen understanding of who uses the site and then take the simplest approach to giving them what they want—and it's no wonder that a multifarious and fractious sports world can wrench a design off track. ●

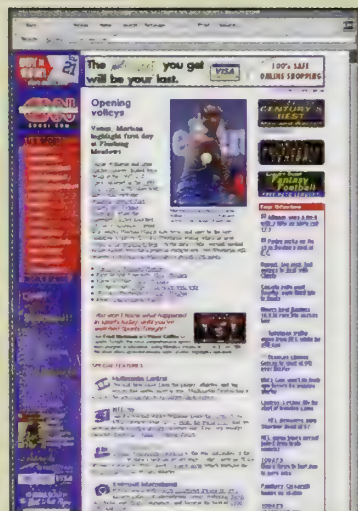
HOW THE NEW DESIGN AIMS TO SCORE

New Design

CNN.com's new design is trying to streamline a user's path to their interests in just a few quick clicks.

The old logo was not sharp and got lost on the page. A new logo will be combined with special feature promotions. The goal: to make sure features are clearly identified as editorial content.

Old Design



The top index box on the site's left-hand navigation bar grew too long and unwieldy. Now the navigation bar will become shorter. Topics will be rotated by season, and the bar will highlight special events.

News stories are moved up so that four or five appear high on the main page, emphasizing CNN's commitment to breaking news.

Special features section, which became a grab-bag of old material, gives way to "water cooler" tidbits about current sports news.



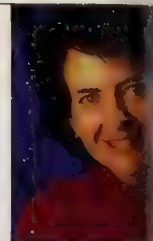
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How to Talk the Talk

Here's a lesson in Geekspeak for all you offline country cousins

Summer is pretty much over, but you're finally heading out on a much-deserved vacation, part of which you'll spend pondering how you, too, can join the Internet rush. Your packing list: sunscreen (check); business book with 'digital' reference in title (check); e-commerce business plan that's scalable, extensible, and defensible. What, you don't have that? You're in trouble, mate. There's now a digital counterp

for the old cliché that every L. A. busboy and cab driver has a screenplay in his back pocket. As I sat beneath a swaying palm tree in Hawaii on my vacation, I heard a couple formulate, debate, and abandon an entire e-commerce business plan. It had something to do with printer drivers. And the whole episode took place in a single poolside sitting, punctuated only by his run for mai tais and her intervention in their toddler's tussle with another kid in the shallow end. But since most of the business planning took place in Geekspeak, I suspect the uninitiated within earshot were clueless. As comic Steve Martin used to say about the French: They have a different word for everything.

As a public service, Digital Dispatch would like to provide this handy-dandy clippable guide. With it, you can talk loudly and make your beachmates think you're a player in the Internet world. You can so confound your offline kin with jargon that they'll quit making fun of your eight-year-old Honda. You may even impress your children. But don't try this on the college crowd. Here in Silicon Valley, more than a few undergrads refer to their tuition checks as "seed financing."

The trick to sounding like an Internet entrepreneur is to use these terms while directing a sneer and a narrowed-eyed squint at anyone who dares question what you're talking about. Fact is, as the new economy—oops, sorry, the New Economy—gets more and more hyped, attitude and jargon are far more important than logic or clarity. Use these terms,

"The essence of my value proposition."

"It's far too early to monetize this."

"That's so dirt world."

act confident, and you'll not only sound like an Internet entrepreneur, you may also end up raising venture money you didn't realize you were asking for. Here you go:

BUSINESS MODEL. Silicon Valley business plans are

longer about business, they're

about "business models."

literally, this translates to:

way we'd like to make money

making money were the point

being in business in the New Economy.

Practically speaking, the term helps

avoid annoying questions about revenue

profits and gets the focus where you want

it, on your resolute march toward 110% market

penetration and presumably the 22nd century,

when money will no longer be relevant.

Sadly, the trouble with Internet business

models seems to be that so many give away

business away for free and overcharge for the

other half. This might work, if only the

other guy's business model weren't the norm.

image of that strategy, thus making it possible

for customers to get everything for free.

VALUE PROPOSITION. When you're discussing

possible new ventures, use the term "value

proposition," the New Economy way of saying

"the point." Like most such terms, the term

isn't new. The railroads' value proposition

example, was that you would pay dearly to

months walking or wagon-riding and severing

layers of skin to get hauled across the country

seat. But if you use some kludgy term like

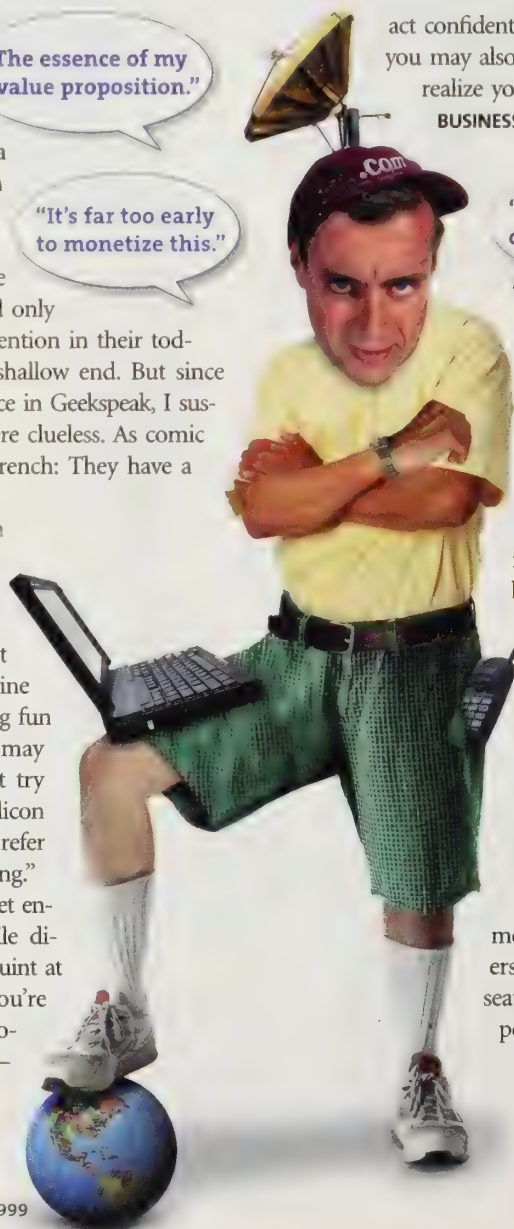
"point" or "the idea" these days, someone will

variably suggest that your free-computer

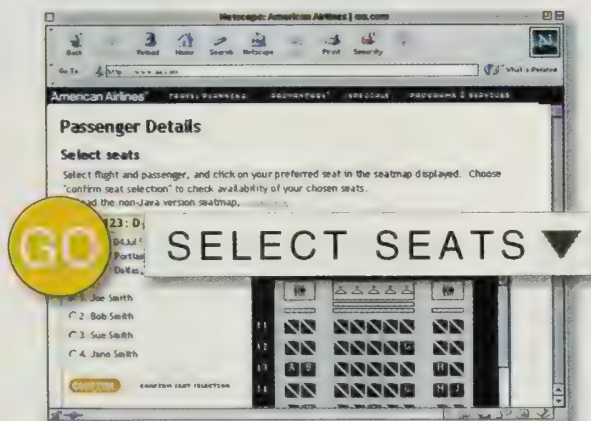
search engine is a rather mundane concept.

The techno-smarty-pants "value proposition"

gives you the cachet of a river



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gambler. "The table limit here is too low," the term suggests. "Take a walk with me up on the promenade deck, and we'll discuss a bet I find a little more interesting."

THE INTERNET SPACE. Yet another euphemism for the word "business" in the age of profits-optional. Silicon Valley entrepreneurs don't have competitors anymore, they just have "people who are in our space," and it's very much in fashion to define competitors right out of your space. "Their free-coupon search engine is only a value-add in a very, very small corner of this space," is one way of putting it. Actually, that means nothing, but it sounds at once condescending and brightly confident.

Want to deepen your Internet space? You'll have to find a way to monetize more eyeballs

If you're still encountering skepticism, shake your head sadly and comment that few people realize how "deep" your space is.

EXTENSIBLE. No one actually knows what this means, but it's something your scheme absolutely must be. It has something to do with the value proposition that your business model will work not just in your space but can easily expand or extend into another. It's a kissing cousin of another overused whiz word—scalable—the Internet equivalent of an elastic waistband. Your business can grow without changing underwear, er, investing in a new server farm.

THE DIRT WORLD. It's replacing "bricks and mortar" as the I-world's description of folks who sell real stuff to real customers who carry icky things like cash and shopping bags and expect such disgusting amenities as public rest rooms. The contempt is palpable. When referring to this Old Economy model, curl your lip, stress the word "dirt," and jerk your thumb toward the window.

OFFLINE. It used to mean your computer wasn't currently connected to a network. Then, it was used in meetings to get kibitzers to shut up: "Can you two take this discussion about the Halloween-party menu offline?" But like "dirt world," it has come to refer to people who aren't getting "it." The "offline" world is the new Luddite colony of those who don't use e-mail and haven't ordered their direct-marketing people to develop Web-based order forms. Offline people let L. L. Bean catalogs and other "dead-tree"

products pile up in their Maine cabins. I fear a postapocalyptic movie starring Kevin Costner or Mel Gibson will some day portray "The Offliners" as angry, murderous, nuclear holocaust survivors who pray to an all-knowing being they know only as Java.

VIRAL MARKETING. This used to be called "word of mouth." Now the crux of every e-business plan calls for happy customers to do your marketing for you. Yippee! Now we can spend the marketing budget on beer! (It's fair to point out that customers spread the word on the Net at several orders of magnitude faster than by chatting loudly on a commuter train.)

MONETIZE. An inevitable stage in your business plan is when you go public, cash out, and retire. In the New Economy, it's actually possible to do this before

any customers show up. However, technically, to monetize a New Economy business is to figure out where and how to inject actual revenues in the thing. Don't confuse this with investment capital, which is virtually limitless. No, this is the real ka-ching: customers who have accepted your value proposition. For

lowen fun, you can deploy the term "monetize eyeballs." That sounds terrifying and ghoulish, but it actually refers to figuring out how to make money off people who are simply innocently looking at your site. Come to think of it, that's terrifying and ghoulish.

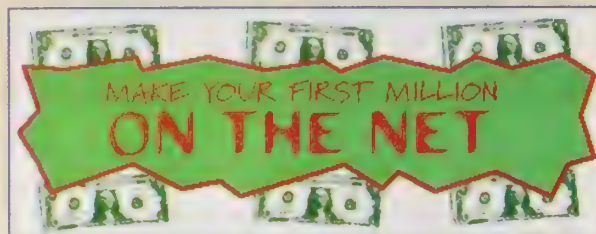
INTERNET TIME. At one level, the luxury of abundant, overflowing, compelling opportunity in a stubbornly 24-hour-a-day world. At another, what everyone tells you you now must do everything in or else. Most poignantly, Internet time has replaced headache, flat tire, and lit Johnny's ear infection as digerati excuse for why we're in such a bad mood all the time; why we didn't call back or remember your birthday; why our "personal info structures" (Geekpeak friendships and marriages) are potholed and creaking; why dentists are opening trailer offices in our company parking lots; why our kids have taken to e-mailing us from school computer lab to remind us to please not forget soccer practice (again).

The real translation, I fear, is speed at the price of sacrificing thought—and thoughtfulness. ●

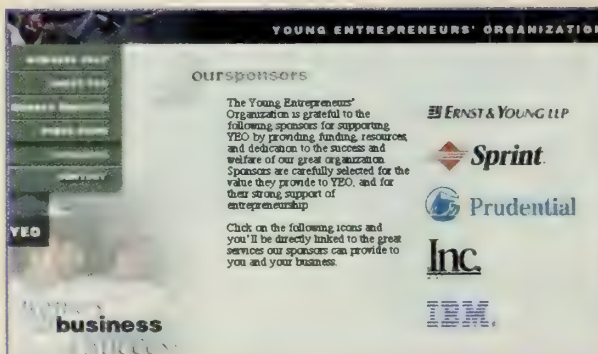
POINTERS

O.K., so you've got the jargon down pat. But you still don't have the right "value proposition." At the tongue-in-cheek Tripod Business Plan Generator, they'll do it all for you: name, business plan, and suggestions for venture capitalists to hound.

www.tripod.com/explore/fun_games/business_plan



If that works, you could find yourself running a \$1 million-plus enterprise without a "global peer-based network" (unthinkable in the New Economy). Better run, not walk, to the Young Entrepreneur's Assn. and start networking with like-minded individuals. www.yeo.org



Another support group for entrepreneurs who need help with everything from finding an accountant to book all those "monetized" eyeballs to swapping stories on the stresses of Internet time is the mailing list "Gotthebug." To subscribe, e-mail: gotthebug-subscribe@topica.com.



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When it comes to succeeding, adidas knows it takes a winning team. They needed a Women's World Cup Soccer e-commerce site that protected their brand and offered world-class customer service. But more, they needed it fast. That is why they partnered with Pandesic.

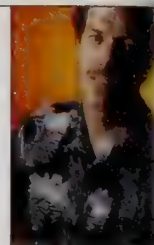
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Is that E-Commerce Roadkill I See?

Net retailers are likely to face a major shakeout after the holidays

It's easy to get giddy about the limitless potential of e-business. Just look at the numbers: Forrester Research Inc. says that consumer e-commerce will grow from \$7.8 billion last year to \$108 billion in 2003. With growth like that, you can't blame online retailers for believing that a large chunk of their sales would not have happened if not for the Web's point-and-click e-

Turns out that's a crock. What e-tailers forget is that, while the Web's shelf space may be unlimited, customers' bank accounts are anything but. It's now apparent that e-tailers are largely stealing sales from stores and catalogs. And we're talking one major heist. In an August report, Jupiter Communications estimates that just 6% of consumer e-commerce revenue is new spending—a figure that shocked even the study's author, analyst Ken Cassar. Face it, says Bradford C. Koenig, managing director in technology at investment banker Goldman, Sachs & Co., "ultimately, this is a zero-sum game."

Surprising as that sounds, I can't really argue with him. Sure, I've bought a few more CDs and books than I would have otherwise, plus an alarming number of old postcards on eBay Inc.'s auction site. But those are small shakes. I haven't yet bought computers, couches, or cars online. And if I do, that will replace buying them at stores. "There are only so many dollars to go around," says Cassar. "People aren't going to eat more because of the Internet."

POST-HOLIDAY BLOODBATH. In the e-commerce frenzy, few people have pondered the meaning of this simple fact. But here it is: We can expect a bloodbath among e-business upstarts right after the holidays. Yup, that soon. Think about it: In each market category, at least three or four major players and many more wild cards all hope to come out on top. They're pumping tens of millions of dollars this fall into portal deals and TV ads. "Probably 2,000 dot.com companies are spending down to dangerous levels," says Ken Orton, chief strategist for e-business at San Francisco consultant Cognitative Inc.

And on the Web, the lack of physical and geographic constraints is likely to mean even greater concentration in each market segment than in the traditional world. The result: Only two, maybe three companies can win big in each sector. The rest? Roadkill, or perhaps targets for bricks-and-mortar laggards fearful of getting "Amazoned." "After this holiday season, the honeymoon period

will be over," says James W. Breyer, managing partner with venture capitalist Accel Partners. "We are likely to see a brutal shakeout." You don't need a magnifying glass to read between those lines: If consumers don't buy, the moneymen say bye.

Traditional retailers shouldn't be relieved, however. They've been dragging their feet, hoping to avoid cannibalizing their stores by offering a relatively small number of their products online. That's a mistake that won't go unnoticed by savvy online consumers.

Check out Kmart Corp.'s site: Its product selection is limited, and some items are even out of stock. It's a safe bet that sites like Kmart's will cannibalize their stores—but on rivals such as Buy.com or DirectStore.com certainly will.

"NOT WORRIED." The post-holiday realization that e-commerce's limitless will almost certainly lead to quick consolidation in a raft of online markets, from pet supplies to health products. It has already started: Giant drugstore chain CVS Corp. snapped up online health site Soma.com in May, pet-supply chain PETSMART combined



startup PetJungle.com in June, and in August, Walt Disney bought a controlling stake in Toysmart.com. So when CEOs like DirectStore.com's Josh Newman blithely declare, "We're not worried about the competition," I can't help but shake my head.

Consolidation is inevitable in any emerging industry. Think autos in the 1930s, computers in the 1980s. But hordes of e-commerce companies seem driven more by a chance to get rich than a passion to change the world. "Many of these companies have been financed on nothing more than an idea," says analyst Christopher E. Vroom of investment bank Thomas Weisel Partners. That's why the coming shakeout won't necessarily be such a bad thing. If consumer e-commerce really is a zero-sum game, we'll soon discover who are the mercenaries and who are the real revolutionaries.

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WHAT'S THEIR EDGE?



BACK IN CINCINNATI: P&G's Beausejour and Lafley pick up some beauty tips from IVP partners Yang and Haley

company avoid the fate of such recent corporate dot.com flops as Toys 'R' Us Inc., which struggled with conflicts between its stores and online efforts? The answer: become one of the nimble upstarts. "We wanted to create conditions common in the most successful Internet companies," says Denis Beausejour, P&G's worldwide vice-president of marketing for beauty care and a chief backer of reflect.com.

The result is a corporate cyber-venture like no other. On Sept. 13, P&G announced that it will launch reflect.com, a startup that will bypass P&G's 162-year-old ways and surrender itself almost entirely to the frontier culture of Silicon Valley. It's part of Procter's extensive corporate makeover that will get new products to market much faster. For starters, P&G is teaming up with Institutional Venture Partners, a Menlo Park (Calif.) investment firm famous for backing Net pioneer Excite Inc. IVP is kicking \$15 million into the

\$50 million venture (and getting a 15% share), compared with P&G's \$35 million. And now that the upstart has been spun out into a separate entity, reflect.com is heading for San Francisco.

"BORN AND BRED." There will be no going back. P&G will force the dozen or so employees moving west to resign from the parent company so they can truly understand the risks of a startup. Many will take pay cuts in exchange for stock options. "We wanted to combine P&G's consumer knowledge and innovation with an Internet-savvy Silicon Valley company and, frankly, with Silicon Valley speed," says Alan G. Lafley, P&G's president of global beauty care, who is serving as reflect.com's acting CEO until an outside candidate is found.

Perhaps the most novel aspect of the venture is that P&G won't be relying on any of its powerhouse brands. "We want to learn to do something born and bred on the Net," explains Lafley. It's a strategy that's not only pioneering but smart, some experts say. Internet companies need to break the mold of traditional marketing, says e-commerce analyst Christopher E. Vroom of Thomas Weisel Partners.

How did the packaged-goods stalwart come up with such a radical approach?

INTERNET

P&G GIVES BIRTH TO A WEB BABY

reflect.com melds P&G's labs and Silicon Valley savvy

st February, a group of executives at consumer-products powerhouse Procter & Gamble Co. had a bold idea. They wanted to sell cosmetics and hair products customized to the looks and preferences of each woman who shops on the Internet. Sounds ambitious, even for the world's third-largest beauty-care giant, with sales of \$7.5 billion on brands as Max Factor, Vidal Sassoon and Noxema. But the team went to work, and, in just a few months, they came up with a business plan, developed a technology to customize products, and created a prototype Web site. They even picked a catchy name for the new venture: reflect.com.

But something still wasn't gelling. Sure, the Cincinnati-based giant had plenty of experience peddling everything from Pampers to Crest on its three-year-old P&G Web site. But reflect.com wasn't about repackaging the company's old brands for new online shoppers. Its goal was to introduce makeup and shampoos so personalized that no two individuals would get the same items. Not even online supermerchant Dell Computer Inc., which customizes its brand-name PCs, goes that far.

So P&G's top brass started wondering how a far-flung \$38 billion behemoth could best a flood of nimble, tech-savvy upstarts whose only mission in life is to win on the Web. And how could the

The site will use an interactive question-and-answer process to whip up personalized products and packaging

The tale begins last May, when Beausejour and a handful of other P&Gers flew to Silicon Valley. With the blessing of P&G CEO Durk I. Jager, they cruised the region's main artery, Highway 101, grilling executives and venture capitalists about their secrets of Net success. They learned about tapping into the Valley's huge talent pool, stripping out unnecessary layers of management, and juicing up the pace of innovation and decision-making.

That's not to say the cultural differences were easy to bridge. Indeed, even from the beginning, they have led to some hairy situations. For instance,

"For us, once we have a handshake and a term sheet, the deal is done."

Despite the more formal process, P&G threw caution to the wind on some key points. For one, the consumer giant took the unusual step of giving IVP the same number of board seats as it got, as well as an equal say over such pivotal issues as whether and when to take reflect.com public. P&G did, however, reserve the right to control any reorganization or sale of the company.

Now comes the nitty-gritty part of making this highly personalized Web site work. Reflect.com aims to use an interactive question-and-answer process

Coming up with the next generation in personalization is where IVP can shine. Sophisticated personalization requires sophisticated technology. And from start, IVP delivered a full plate of tactics to help beef up reflect.com's site. In August, for example, the startup team met with execs at Ask Jeeves, an IVP-backed Net company that specializes in a technology that enables customers to pose questions on a Web through a natural dialogue.

CEO SEARCH. With a launch anticipated in time for the holidays, reflect.com is in full-tilt startup mode. Office space has been found in San Francisco's media gulch while the CEO search intensifies. But even at its rapid pace, reflect.com won't outrun its rival gloss.com, a San Francisco-based company that plans to sell upscale cosmetics starting on Sept. 27. Gloss.com

reflect.com offers beauty created by YOU.



PREVIEW: At the site, up to 50,000 makeup, hair, and skin combinations may be offered

when IVP flew to Cincinnati in May to make its pitch to win the reflect.com deal, they closeted their usual informal attire to avoid offending their Midwestern hosts. "They came in dressed as investment bankers, and we were 100% casual," says Beausejour. "Everyone started laughing."

STICKING POINTS. No one was laughing, however, when it came to ironing out details of the partnership. IVP was accustomed to informal negotiations with young entrepreneurs that end quickly with a handshake. But with P&G, corporate lawyers went over every detail. Among the sticking points: how to divide equity in the company among P&G, IVP, and reflect.com's management, and who controls future financing events. IVP partner Geoffrey Y. Yang says the process, which typically takes about a day, dragged on for nearly three weeks. "From P&G's point of view, closing a deal is what's relevant," says Yang.

to determine each woman's needs. Then, using P&G's research-and-development lab (and some technologies for mixing individual formulations that the company does not want to discuss), it will whip up truly personalized products and packaging per the specifications of each order. For instance, each product might bear the buyer's name. Reflect.com's ultimate vision is to offer as many as 50,000 unique hair, skin, and makeup combinations.

And reflect.com says it will do all that customization at a cost no greater than you'd pay for high-end merchandise at a department-store cosmetics counter. Sounds hard to believe, but P&G claims it can make the math work. It expects to save money by leveraging its existing infrastructure along with reduced inventories and lower sales costs.

The Heartland Meets Techdom What Each Brings to the Table

PROCTER & GAMBLE'S CONTRIBUTIONS

- Extensive R&D infrastructure
- Branding/marketing expertise
- Launch team
- Existing cosmetics business
- Credibility with media and Wall Street

IVP'S CONTRIBUTIONS

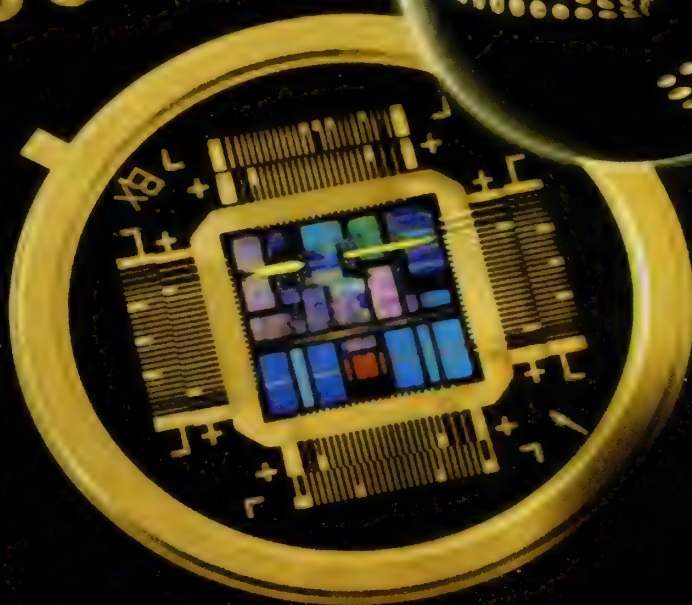
- Extensive Silicon Valley network
- Internet startup experience
- High-tech recruiting muscle
- Speed
- Credibility with Net Establishment

won't make its own cosmetics. But it does hope to be one of the few e-tailors to sell popular high-end brands such as Calvin Klein or Chanel. And gloss.com will offer some personalized features, such as individual beauty analysis by professionals.

Still, with its novel approach, gloss.com hopes it has found a way to turn one of the nation's largest corporations into one of the Web's leanest online competitors. "This is a learning experience," says Lafley—one that P&G will likely put to many uses if it gets it right.

By Linda Himmelstein in Silicon Valley, with Peter Galuszka in Cleveland

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By most statistical measures, the past few years have felt like a return to the good old days of the 1960s. The unemployment rate has fallen to just over 4%, inflation is nearly nonexistent, and productivity growth has accelerated.

There is, however, one big difference between today's boom and the experiences of the 1960s. Back then, it really was true that the rising economic tide lifted everyone. No matter where you worked—be it a factory, school, bank, hospital, or hotel—you saw your wages rise in the 1960s.

But today, there are vast disparities in wage growth between different parts of the economy. If you work in a "New Economy" industry such as software, financial services, media,

or consulting, you have probably seen your earnings skyrocket in recent years. But if you

Economics

work in an "Old Economy" industry, it is more likely than not that your wages, after adjusting for inflation, have not gone up much. The bottom line is simple: If you stay at a job in an Old Economy industry, you are destined to become relatively poorer and poorer in a richer and richer society.

That's true despite reports of labor shortages in many industries. Grocery stores and hospitals may have big "Help Wanted" signs in their windows and on their front desks, but intense price competition means that real wages in grocery stores and hospitals are actually falling. And while it may be hard to find a carpenter to put a new deck on your house, construction workers are contending with a tremendous influx of nonunionized and immigrant labor. In addition, nonresidential construction is far lower, as a share of gross domestic product, than in the 1980s. As a result, the average weekly wage across all of construction, adjusted for inflation, is up less than 3% over the past five years.

Similar trends exist throughout the entire economy. By BUSINESS WEEK's calculations, average real wages in the New Economy industries have risen by 11% since 1994, while real wages in the rest of the economy are up by only 3%. Compared with 1988, real wages are down by 4.5% in Old Economy industries (chart, page 92). These figures are for production and nonsupervisory workers, but a similar disparity affects every level of the labor force, from managers to sales reps to new college grads. Moreover, these figures do not include stock options, which are a far more important source of income in the New Economy industries.

SOARING PROFITS. This difference goes a long way toward explaining why many Americans are uneasy about their place in today's prosperity. Now, as never before, it matters very much what part of the economy you work in.

How can you tell whether you are part of the New Economy or the Old Economy? The key is whether the main product or service of your industry is information. If so, then the exponential gains in the speed of information processing insure falling costs and enormous opportunities for growth. That, in turn, makes it far easier to pay higher wages. For example, financial services are in the New Economy because they are primarily an information business—no physical products or personal services change hands. As a result, banks and Wall Street firms have reaped the full benefit of the information revolution, in the form of lower costs, new products, and

INDEX OF AVERAGE WEEKLY WAGES

ADJUSTED FOR INFLATION
PRODUCTION AND NONSUPERVISORY
WORKERS IN PRIVATE SECTOR

1988

1.0

1988

1.0

NEW ECONOMY

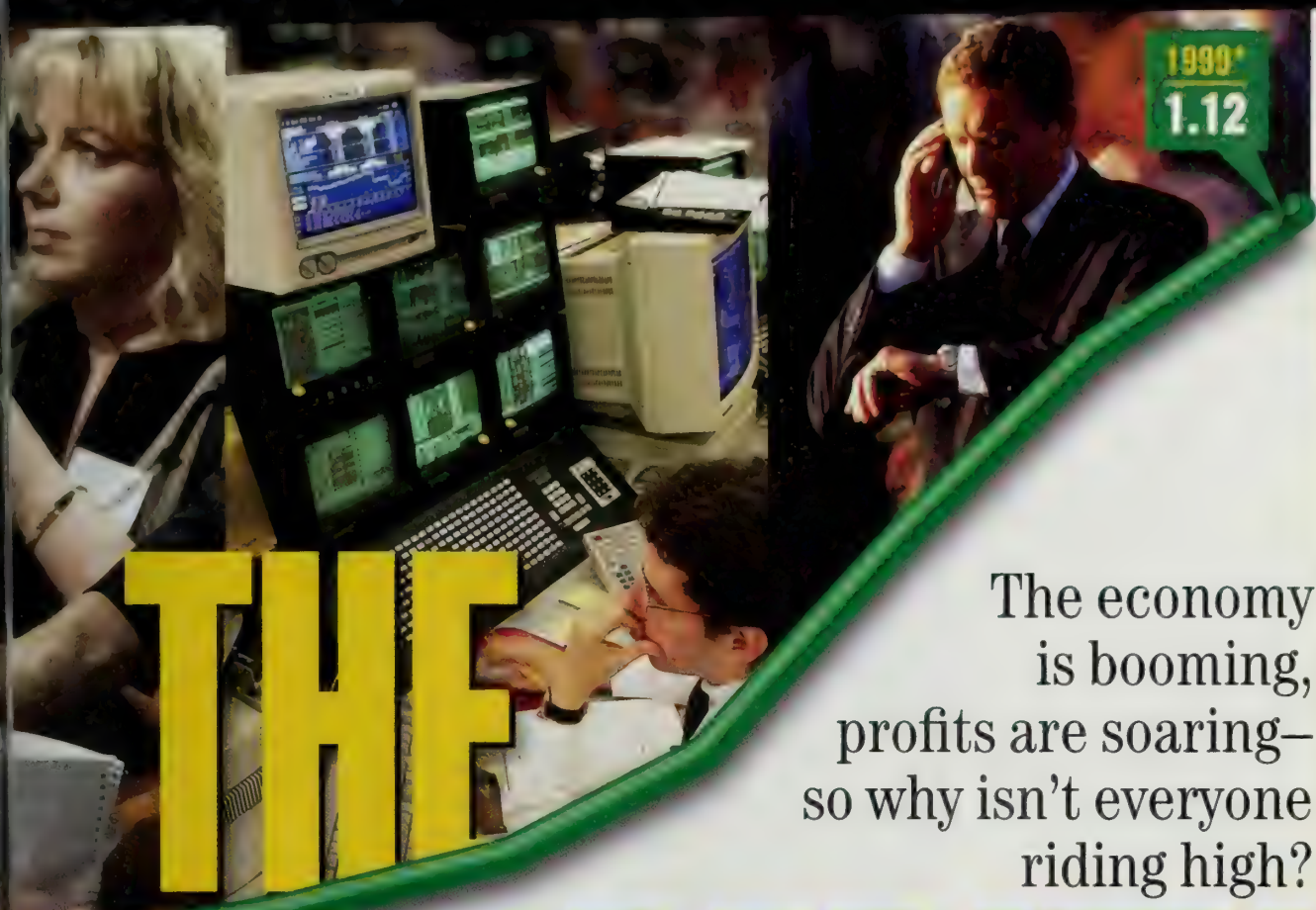
High-tech Equipment /
Computer Services /
Financial Services /
Communications /
Nonstore Retailing

Total Workforce: 19 M

OLD ECONOMY

Construction / Transportation /
Utilities / All Other Manufacturing
Wholesalers, and Retailing
Personal Services / Health Services /
Education

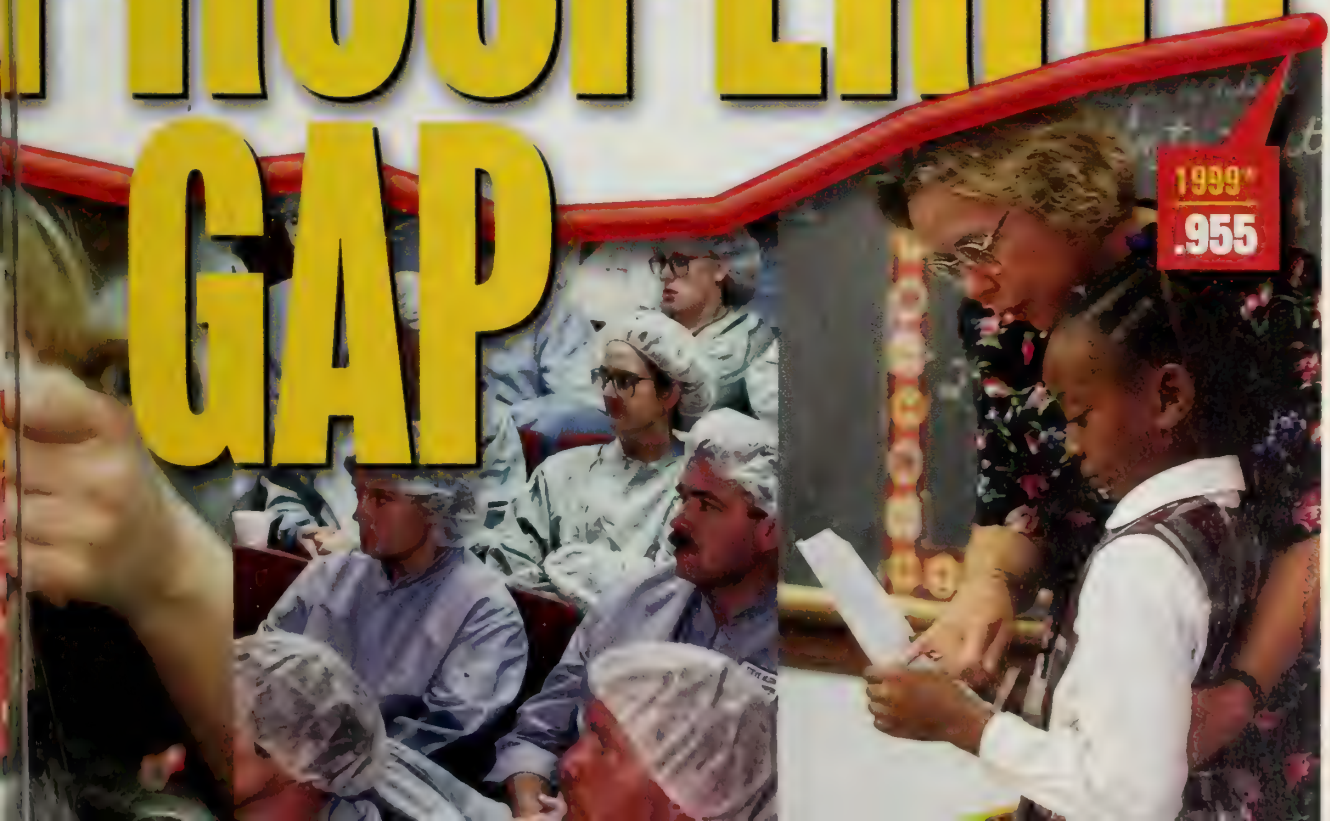
Total Workforce: 91 M



1990*
1.12

The economy
is booming,
profits are soaring—
so why isn't everyone
riding high?

THE PROSPERITY GAP



1999*
.955

soaring profits—and not incidentally, rising wages.

By contrast, Old Economy industries produce tangible goods or personal services, which are less affected by information technology. Putting computers into the factory may cut costs and hold down inventory, but the cars or steel produced don't change very much.

To be sure, the division between the Old and New Economy is not cast in stone. Take higher education. As long as most teaching is still done the old-fashioned way, with individual professors lecturing to classrooms, there is little scope for computers to boost productivity. But as universities move to a different model—tele-education, Internet-assisted learning, and the like—advances in information technology translate into lower costs and potentially lower tuitions and broader markets.

DEEP FISSURES. Nevertheless, the group of New Economy industries is gradually pulling away from the broader economy, opening up deep fissures that did not exist before. With much faster job growth, much higher productivity gains, and much bigger profit increases (chart), the New Economy industries can afford to pay bigger wage gains than their Old Economy counterparts.

It's not simply the less skilled who are suffering. Wages have also lagged behind dramatically in education and health care, industries that are the two biggest employers of college-educated workers. (Education and health account for one-sixth of all bachelor's-level college degrees and a full third of all master's-level degrees.) For example, average elementary and secondary school teacher salaries

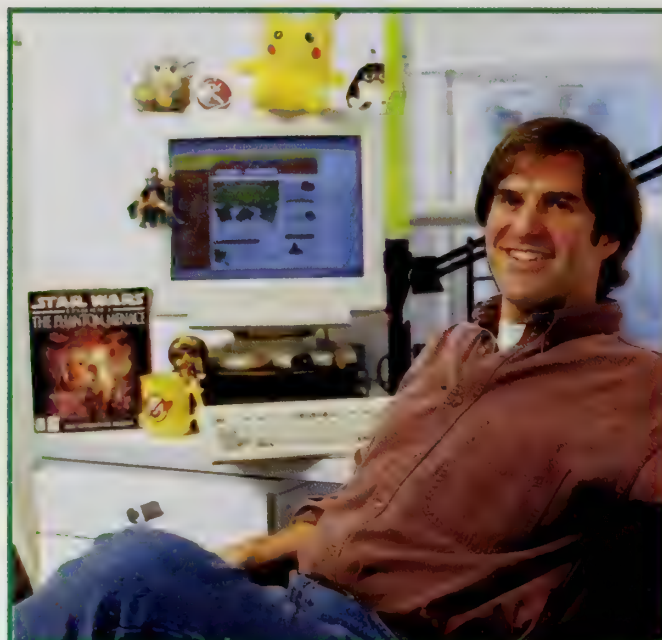
rose at a rate of only from 1995 to 1998. "Our contracts don't even grow at the rate of inflation," says Gause, 40, an Ann Arbor (Mich.) elementary school teacher. Her last three increases were for 1% and 3%.

What's more, teachers are finding that they have to get more education just to stay in place. John D. Berry, a San Francisco teacher, is taking additional graduate courses in order to improve his chances of getting a full-time position. "The requirements to be a teacher get higher," says Berry, who already has a master's degree from prestigious Columbia University Teachers College.

In the health-care industry, real wages have stagnated since the health-care reform squashed profits and prices. For nurses, the shortages that drove up salaries in the 1980s and 1990s have largely disappeared. "A lot of nurses went into it and thought it would be a very high-paying profession," says Carolyn McClerking, 31, a nurse at the University of Michigan Medical Center in Ann Arbor. As a result, she went back to school for her master's degree in nursing in order to become a better-paid nurse-practitioner. Still, that is not a sure thing, since a glut of new nurse-practitioners and physician assistants have hit the job market in the past few years. "Right now, the salaries have pretty much peaked," says Ray E. Smith, who runs a health-care recruitment firm in Savannah, Ga. "I don't anticipate it getting any better."

What's happening is that a new class of left-behind workers is being created, encompassing a large portion of the workforce. They have jobs, sometimes with high salaries, but while their New Economy counterparts' earnings soar, the left-behinds are struggling to post small real gains in income. That's why, despite the overall prosperity, many households keep taking on more debt.

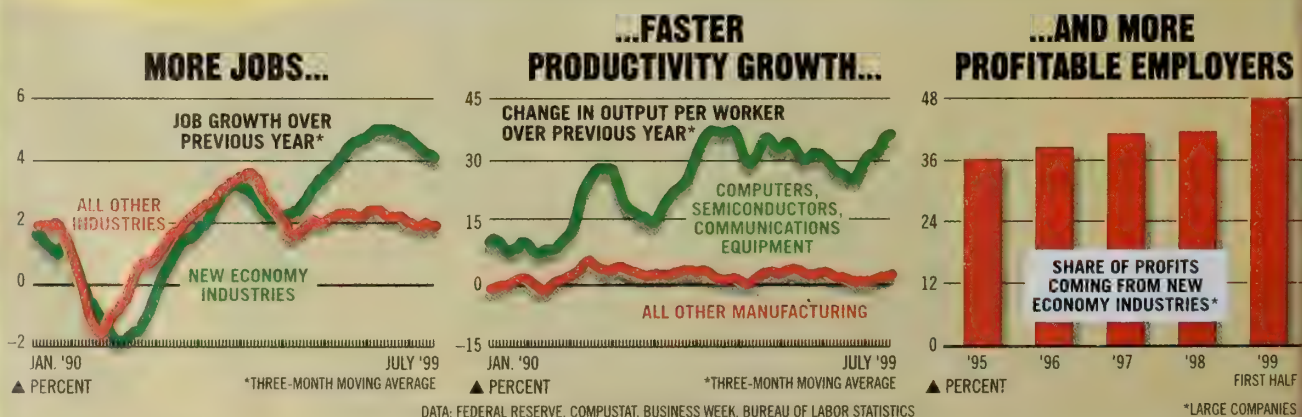
To be sure, there have been important spillover effects from the New Economy boom to the rest of the economy.



PROSPERING At 38, Scott Wilder, vice-president of Internet startup KBkids.com, is already anticipating retirement. "I plan to get there within the next 10 years"

Economics

WHY NEW ECONOMY WORKERS DO BETTER



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one, the low unemployment rate has benefited millions of poor workers who were not able to find jobs before. For another, until fairly recently, real wages in trucking have been falling, since it has been exceptionally easy to get a license to drive a truck and the industry is completely deregulated. But the surge of on-line retailing has turned skilled truckers into an essential part of the Internet economy. "Driver wages at major carriers are clearly outstripping the rest of the economy," says Victor Klemp of SignPost Inc., which tracks drivers' wages. Moreover, most people who have invested in the stock market have done well, no matter what industry they work in.

GREAT LEAP. In addition, a growing number of workers are making the jump from Old Economy industries to the better opportunities and faster wage growth of the information sector (page 102). Berry, for example, is starting to look at job listings with Internet companies. "I'd love to be on the technological side as an educational specialist," he says.

But for the foreseeable future, most Americans will be locked into Old Economy jobs without much hope of big income gains. Indeed, based on current trends, the wage gap between New Economy and Old Economy workers seems likely to widen for years to come. The result

will be a deepening fissure in the workforce along industry lines, which will likely

Economics

be eventually reflected in politics as well.

In many ways, the closest parallel to today's situation comes from the late 19th and early 20th centuries. The Old Economy back then was agriculture, which in the 1870s accounted for roughly 35% of the economy. At that time, the cutting edge of the New Economy was the newfangled and relatively small industrial sector—manufacturers, railroads, and utilities—accounting for only 10% of output. Spurred by the advent of such innovations as automobiles, telephones, and electrification, the industrial sector quickly caught up and far surpassed the farming sector in jobs, output, and productivity.

With the industrial sector booming, once prosperous farmers kept losing economic ground relative to factory workers, railroad employees, and other members of the industrial workforce. Real wages in manufacturing rose much faster than wages for farm workers. What's more, farmers, burdened by falling farm prices, took on heavy debts in order to survive. When the economy slowed, they would lose their



LAGGING "Our contracts don't even grow by the rate of inflation," says Lauri Gause, 40, an elementary school teacher. Her last three pay raises were for 1%, 2%, and 3%

has shrunk by nearly 400,000 over the past year. As a result, most unions are settling for wage gains of 3% or less—better than inflation, but far behind what New Economy industries are paying. Even in the booming auto industry, record-setting sales, jobs are being outsourced to lower-transplants and to suppliers. "Unions are not going a wages," says David L. Littmann, chief economist at Comerica Bank in Detroit. "American labor is on the defensive."

Second, productivity is growing much faster in the New Economy industries—and all else being equal, faster productivity growth translates into faster wage growth. In manufacturing, for example, makers of computers, semiconductors and communications equipment are boosting their output per worker at over 30% annually (chart, page 92). Meanwhile, productivity in non-high-tech manufacturing is only rising at a 2.5% annual rate. Reflecting these differences, hourly wages in semiconductor and computer manufacturing are rising substantially faster than the pay of other factory workers.

Although productivity is harder to measure in the service sector, a similar link between productivity growth and wage increases seems to hold there as well. Industries whose primary output is information are the best positioned to take advantage of the explosive productivity gains from information technology. Not surprisingly, they are also industries in which wages are soaring. Journalists have seen

wages rise as the result of demand from Internet-based media companies. According to the Bureau of Labor Statistics, the median wage for editors and reporters has risen by 18% over the past five years, one of the largest gains in the economy.

By contrast, information technol-

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—Chad, retreat facilitator

3pm

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GAINING *Until fairly recently, real wages in trucking had been losing ground. But the surge in online retailing has turned skilled truckers into an essential part of the Internet economy*

has a much less immediate impact on the productivity of businesses that provide personal services, such as retail, hotels, beauty, health care, or education. Consider grocery stores. Despite the use of computers to manage inventory and purchasing, the fundamental business of grocery stores—stocking shelves and checking out customers—has not changed much. According to BLS figures, output per hour in

food stores actually went down by 5% from 1994 to 1997, the last year available.

Economics

Combined with intense competition from Wal-Mart Stores Inc. and others, that's a major reason why pay in food stores has risen by only 1.8% over the past year. And unable to boost productivity much, grocery chains have been holding down wage increases and getting rid of high-paid, experienced workers.

How does that jibe with cries of labor shortages coming from retailers, hotels, and other people-intensive businesses across much of the economy? It should be no surprise that with pay steadily falling behind the rest of the economy, these businesses are having a tough time finding workers. Grocery clerks and construction workers are scarce precisely because their pay has deteriorated and workers in these industries have changed jobs. The "Help Wanted" signs are a mark of desperation, not prosperity.

At the same time, profit growth has been much faster in the New Econ-

omy industries. In the second quarter of 1999, profits in the New Economy industries rose by 58%, according to BUSINESS WEEK's most recent Corporate Scoreboard. Economy industries showed a profit gain of only 9%. And this is no fluke. In 1994, the New Economy industries counted for 36% of large-company profits, according to BUSINESS WEEK Scoreboard. In the first half of 1999, that rose to 48%.

As a result, companies outside the New Economy sector simply do not have the profit growth to support big wage increases, even if they wanted to do so. That helps explain why economywide wage increases have been so moderate, despite the low unemployment rate. The latest data show wage increases actually decelerating across much of the economy outside of the New Economy industries.

But today, even managers and professionals are finding that they run the risk of being left behind if they are working in lagging industries. Those in industries such as consulting, computers, and telecommunications saw their real salaries

rise by 12% or more over the past five years. In more traditional industries, the gains for managers and professionals were as little as 1%.

That's the reason? Rising productivity and high profits enable the New Economy industries to pay more. "The industries at the top are not that cost sensitive," says Ken Abos, a principal at Hewitt Associates LLC, a Lincolnshire, Ill., consulting firm.

For example, at the age of 40, Scott K. Wilder, vice-president for pro-

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ARE SCARCE BECAUSE THEIR
PAY HAS DETERIORATED**

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STRUGGLING *Despite an increase in chicken consumption, real wages in the poultry processing industry have risen by less than 3% over the past five years. Until recently, poultry profits were stagnant*

uct development at Internet toy retailer KBkids.com, is already looking ahead to retirement. Having prospered financially from a succession of high-tech jobs, Wilder says: "I plan to get there within the next 10 years."

The same disparity shows up for sales representatives, an essential part of most businesses. The Willy Lomans of today can expect to see their incomes rise far faster if they

work at a New Economy employer rather than a more traditional company. For example,

sales reps selling telecom equipment saw their average income, including commissions, rise by 30% from 1995 to 1999, according to data from Hewitt. By contrast, their peers at traditional manufacturing companies enjoyed only a 3% increase in income over the same period.

The new college grad, making a choice about which direction to go, faces an even starker dichotomy. Overall, employers are anteing up big for new graduates, but New Economy companies are on a level by themselves.

Consulting firms are offering business administration majors a 25% premium over other employers, according

to data from the National Association of Colleges & Employers. Management consulting firms are growing faster than computer software firms, and even non-supervisory workers at the consulting firms are seeing pay rise at an amazing 7% clip.

What will happen when the current

expansion comes to an end, as it inevitably will? History suggests that when the next downturn hits, workers in old-line industries will be quite vulnerable to losing the meager wage gains and perhaps even their jobs. Facing tense competition, low profit margins, and the prospect of slow growth, Old Economy companies will have to ruthlessly slash costs.

What's more, many of these same workers, because their wage gains have been relatively meager, have been drawn down savings and financing their purchases out of rising home and stock prices. Just ask Erica S. Wexler, 36. She recently started her own child-care business after five years teaching at a Dallas day-care center. In that time, she had raised. "We're living on credit, basically," she says. And Stephanie Blue, a certified nurse's assistant in Jupiter, FL, "You hear in the papers and on the news about this boom economy, and we're not sharing in it." Blue makes \$14,000 a good year, typical for CNAs.

When growth slows, the prosperity gap will translate into enormous political tensions between workers in

Economy industries and those in the New

Economy. For New Economy industries, free trade and relatively

regulated markets are critical parts of economic policy.

For most voters are still employed in industries with relatively slow wage and job growth.

For these workers, security and benefits are the important issues, and there may be a

in protectionist sentiment, similar to that expressed by conservative P

**WHEN GROWTH SLOWS,
THE GAP WILL TRANSLATE
INTO POLITICAL TENSIONS**



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idential candidate Pat Buchanan. "Come the next recession, neo-Buchanan thinking becomes popular," says Frank S. Levy, an economist at Massachusetts Institute of Technology.

What's more, the next downturn could create fertile ground for new political parties. Both Democrats and Republicans have become

Economics

increasingly dependent on New Economy industries for campaign funds. That's not surprising, since that's where most of the new wealth is being created. But it does mean that there could be an opening for a new party that addresses the concerns of Old Economy workers.

To be sure, both Democrats and Republicans have proposed measures to try and narrow the prosperity gap. President Clinton's recent tour of poor areas in the U.S. was designed to highlight his strategy for closing the gap, including trying to encourage more New Economy jobs in these areas.

But just as movements in continents produce earthquakes and volcanoes, so will the growing prosperity gap create social upheavals for years to come. No matter what the politicians do, the Information Revolution will continue to accelerate some parts of the economy faster than others. We be riding this tiger for years to come.

By Michael J. Mandel in New York, with bureau reports

HELP WANTED: MOBILEWORKER.COM

Workers in the New Economy are clearly outstripping their Old Economy counterparts in wages and salaries. Yet as in past eras of rapid technological change, the forces driving this widening disparity are also creating new opportunities for mobility. The growth of the New Economy sector is giving millions of smart and motivated U.S. workers—from new college grads to network technicians to top managers and professionals—a chance to join the leading sector of the economy. The result: an upward movement of incomes.

Indeed, in many ways mobility is an inevitable consequence of the rapid job growth of the New Economy sector. Today, New Economy industries are accounting for some 30% of all new private-sector jobs being created. For managerial and professional jobs, the percentage is much higher. The demand from the New Economy is simply sucking in workers from the existing industries and from outside the labor force.

GRADS WELCOME. Best placed to take advantage of the new opportunities are recently minted college grads. Having grown up with computers and without any investment in existing careers, they are flocking to the growing parts of the economy. About half the job offers to new college graduates are coming from New Economy industries, according to the latest data from the National Association of Colleges & Employers. The top four—consulting, accounting, software, and finance—ac-

count for 30% by themselves.

At the same time, people in existing jobs are retooling. Enrollments at vocational schools are rising, as blue-collar workers seek networking and computer repair skills.

The mobility extends even into mid-career managers and professionals, who are already heavily committed to existing jobs. To be sure, there are enormous obstacles to moving from an old-line

JUMPING THE GAP

Here's how the rise of the New Economy is increasing mobility and boosting incomes:

- ▶ New college grads are flocking to New Economy companies for higher pay and more interesting work
- ▶ Workers without a college degree are moving up by getting retrained for computer-related jobs
- ▶ Managers and professionals are building on transferable skills such as marketing to make the shift to potentially lucrative New Economy positions

DATA: BUSINESS WEEK

company to a New Economy job, especially for an experienced worker. Sales reps who have spent their whole careers selling paper goods would have a hard time selling e-commerce services. "You don't know the products, the lingo, the application," says Sandy A. Miller, a consultant at Hewitt Associates, a human resources consulting firm based outside Chicago. The new jobs also carry a degree of risk and instability that makes them less desirable to established workers. Moreover, because a greater share of compensation is tied to stock options, the base salary may be less. Senior executives may take a cash compensation haircut of up to two-thirds of their former salary, but they are handsomely paid with an equity stake.

Nevertheless, the recent success of many who have job-jumped, plus the long-running bull market, have given people both the psychological strength and financial flexibility to take the risk. It's now not only acceptable for senior execs to make the move, it's almost expected. "People wonder why you aren't making the change into the fast-growing companies," says David B. Kixmiller, head of the international technology practice at Heidrick & Struggles International, an executive recruiting firm.

"It's not a stigma or failure if your first job [in an Internet startup] doesn't work out," he adds.

Some people will find it easier than others to make the switch. Seasoned marketing executives, for example, are in high demand in many New Economy companies. Indeed, "there is a tremendous need for branding on the Internet to

set your product and message apart and above everyone else's," says Peter V. Polachi, a partner with Heidrick & Struggles. Similarly, with the explosive growth of e-tailing (Web retailers), there is a "crying demand for logistical skills in merchandising and replenishing products for commerce," says Robert D. Kenzer, a search consultant at Kenzer Corp.

Of course, these sorts of job switches need not narrow the income gap between New and Old Economy industries. Indeed, if the best people are flocking to the fastest-growing sectors, the gap may actually widen. Yet, for both the economy and for Americans, such mobility can only be a good thing.

By Michael J. Mandel and Todd Gutner in New York

HOW LTV'S GRAND SCHEME HIT THE SMELTER

wanted a nonunion plant but now must welcome organizers

Companies rarely suffer a humiliation as thorough as the one LTV Corp. just endured. It's even more unusual for a labor union to be the issue. But over the past months, the 4 steelmaker lost its chairman and signed an unprecedented deal with the United Steelworkers (USW) that amounted to a total out-face, giving the union the blank check to organize workers at a fiercely anti-union Southern minimill.

And that's not all. Since LTV only owns 50% of the Alabama-based minimill, the Steel Co., the steelmaker must get its co-owner, British Steel and Sumitomo Metal Industries, each with 25% of the plant, to agree to welcome the union within a year. If they refuse, as seems likely, Cleveland-based LTV must "exit" its partnership with the minimill, states its agreement with the USW, which was ratified by members in a Sept. 2 vote. The terms are enforceable in court, and would the union need to sue LTV is even on the table for its legal fees.

How did LTV get into this corner? Trico started with a bold attempt by the company to fend off low-cost, nonunion minimill operators such as Nucor Corp. LTV and its partners sank \$450 million into Trico, putting the latest technology into a new plant in Guntur, Ala. David H. Hoag, LTV's chairman and CEO when Trico was announced in 1995, trumpeted the plans, vowing to build similar mills in Asia and Europe.

UNCLE. But the strategy blew up on his face. The crusty CEO misjudged how bitterly the USW would oppose the move. After all, members had approved 15% pay cuts to help LTV through nearly seven years of bankruptcy ending in 1993. Then, during

1994 contract talks, Hoag asked the USW to form a partnership to beat back the minis. Becker agreed, giving more flexible work rules to LTV, which promised not to buck unionization in any unit in which it controlled more than 50%.

When LTV announced the Trico ven-

ture was pushed out after directors realized that Hoag had burned his bridges with labor. Hoag declined to comment, as did J. Peter Kelly, LTV's new CEO. LTV director M. Thomas Moore says the allegation about Hoag is "pretty wild." Meanwhile, the 57-year-old Kelly, who joined LTV in 1963, has expanded the 1994 neutrality pledge to cover Trico. Kelly, who has had good relations with labor, also agreed that Trico CEO Richard Veitch should send a letter to his employees saying that Trico "welcomes unionization of our employees.... What's more, we prefer to have a union such as the Steelworkers." Veitch declined to comment, as did British Steel and Sumitomo.

Kelly may have caved in to avoid spending even more on what has so far been a lousy investment. LTV has sunk \$243 million into Trico, which has lost \$187 million since 1997 because of equipment failure and cheap imports that flooded in during the Asian crisis. LTV's partners have already indicated they won't go along with the neutrality clause, insiders say. So LTV may have little choice but to sell out and move on.

SWELLING RANKS. As for the USW, its victory is a striking example of a new effort by unions to use bargaining muscle to stanch the decades-long slide in membership. The Steelworkers used the LTV campaign to persuade the four other major steelmakers, which also ratified new pacts this summer, not to oppose unionization drives at subsidiaries or joint ventures. All told, these pledges could bring in up to 10,000 new members on top of the 148,000 the union now has in basic steel.

What's more, the two sides need each other in their battle against imports. In the past year, Becker has met with Kelly and the CEOs of USX Corp. and Bethlehem Steel Corp. to plot strategy, and together they have won some import relief from the Clinton Administration. Kelly seems to have decided, after learning the hard way, that it's better to join the union than fight it.

By Aaron Bernstein in Washington and Peter Galuszka in Cleveland



ONE CEO LATER

Kelly, left, took over the helm of LTV after the Steelworkers waged a relentless campaign against his predecessor's "betrayal"

ture a few months later—exempt from the clause because LTV kept its stake to exactly 50%—USW President George Becker went ballistic. Ever since, the union has waged war against LTV, staging demonstrations at company mills to show it couldn't expect a partnership if Trico remained nonunion. "Trico was an out-and-out betrayal of the partnership they asked for," says Becker.

This February, LTV cried uncle. Hoag, 60, retired that month; Becker insists he

EXECUTIVE SUITE

GETTING BOEING TO FLY RIGHT



CFO Deborah Hopkins is forcing the guarded giant to shine a spotlight on where it's losing money

On the eve of a key interview for the chief financial officer post at Boeing Co. last September, Deborah C. Hopkins learned that her 17-year-old son, Patrick, had been seriously injured in a car accident in Detroit. Thousands of miles away in Zurich, where she was based as GM Europe's CFO, Hopkins felt helpless. Unable to get a flight until the next day, she cried all night. But Hopkins kept her morning interview with Boeing President Harry C. Stonecipher, mainly to distract her from thinking about her son's shattered leg and pelvis.

That's Debby Hopkins. To be sure, her family comes first. But she's also supremely practical. Putting her son's accident out of her mind for a few hours—he has since recovered—Hopkins gave Stonecipher her take on the huge

problems facing the aerospace giant. Although she says she was mightily preoccupied, Hopkins was sharp enough to emerge as the top contender for the job. To those who know her, that's hardly a surprise. A master communicator, Hopkins is known for her ability to dissect complex financial problems and offer clear solutions even the numerically challenged can understand. "She was good at selling her ideas," says former boss G. Richard Wagoner Jr., president of GM North America. "She got a round of applause at the end of one presentation. That's unheard of for an auditor."

LONG WAY TO GO. Since starting at Boeing last December, Hopkins, 44, has found herself facing her biggest challenge yet. In recent years, the company's all-important airplane unit has been hit by production crises that led to a loss in 1997 and meager profits in 1998. Although a recovery now looks under way—the company has shown three straight quarters of improving profits—it still has a long way to go to improve efficiency. Hopkins' mission is to ensure that Boeing continues to make strides in updating its antiquated production tech-

niques and accounting **UNRELENTING** practices, even as Hopkins aims to trim billions of dollars from costs by slowing orders could cut revenues some \$10 billion next year.

That won't be easy. Behind the snafus of ballooning production problems, one of Boeing's biggest difficulties has been its secretive culture and a stunning lack of financial accountability. Hard to believe, but before Hopkins arrived, Boeing never broke down the detailed costs of making its planes, rockets, and weapons. It simply developed and built its products and worried about costs later. And Boeing's managers further hurt their credibility on Wall Street with their inability to provide an accurate picture of how deep the troubles ran. Says longtime aerospace analyst Paul H. Nissen of JSA Research Inc.: "You couldn't understand what was going on financially with that company."

Trim and athletic-looking with a shock of short black hair, Hopkins comes with a stellar track record as both a smooth negotiator and hard-nosed cost-cutter from her two previous employers, Unisys Corp. and Gen-

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Motors Corp. Applying the skills she learned in the automotive and computer worlds, Hopkins, the youngest executive and only woman in Boeing's corporate ranks, started with the basics. Which planes and rockets make money, and which programs are in the red?

NEW SCORECARD. Hopkins doesn't have all the answers yet, but she and her team of finance wizards are asking the right questions and crunching the numbers. "My goal is to drive [the discipline of] finance as a force in this company," Hopkins says. Adds Boeing CEO Philip M. Condit: "We are going to be paying a lot more attention to the numbers. Our intent is to be unrelenting. We look to

speech to 600 workers at Boeing's sprawling Everett (Wash.) plant, Hopkins enthusiastically explained how better inventory controls could free up billions for expansion. With Boeing shedding about 3,000 jobs a month, no one missed her point: The only source of secure jobs is a healthy Boeing.

She doesn't shy from the hard facts either; many unprofitable programs must be shed. But by showing why that's needed, Hopkins is winning respect even from union leaders. In the old days, "the company would

After graduating from Walsh College in 1977 with an accounting degree, Hopkins took a finance job at Ford Motor Co. One of her first tasks was analyzing the surprisingly complex costs of producing tractors and setting the price for should charge. She then defended a decision to macho automotive executives pummeled her with questions. "You to know your stuff," says Hopkins.

But Hopkins didn't fit in at Ford, soon left. Married and with a new baby, she was the only woman in the department and was pressured to work

hours. Ford, she says, just "didn't get women" back to work. Landing at computer maker Unisys, Hopkins turned down a prestigious job at its Philadelphia headquarters because she thought the move would strain her marriage.

Her marriage broke up anyway, and Hopkins became a single mom with two young kids. Then, while on a business trip to Europe, she met her future husband, David Hopkins, who was the Unisys marketing director in Europe.

The two married in 1981 and with David encouraging

her to take more risk, Hopkins moved to a bigger job at Unisys' headquarters. She became a key figure in the company's restructuring effort, which most servers believe staved off bankruptcy. Huddling in a hotel room for six straight weeks in 1991, she and a partner hammered out a detailed reorganization plan to repay Unisys' \$300 million debt.

Her success at Unisys caught the attention of GM, which hired her in 1995 to up its auditing of joint ventures. Hopkins moved to Zurich in 1997 to become GM Europe, while her husband went to work for GM, helping its deal convert to the euro. A year later Stonecipher called. Now, 50-year-old David has stopped working, content to take flying lessons and be in charge of cooking dinner.

That has freed Debby Hopkins to focus on the heavy lifting needed at Boeing. Although it's hard to measure progress so far, investors and analysts are hopeful. In part, they're happy that she's putting an end to the contentious relationship Boeing has had with investors. That means crisscrossing the country, meeting with its biggest shareholders and promising that those old days are over. And for Boeing, that's just what the doctor ordered.

By Seanna Browder in Seattle

DEBORAH HOPKINS

BORN 1954, Milwaukee, Wis.

EDUCATION 1977, B.A., accounting, Walsh College.

FIRST JOB In high school, Hopkins modeled and sold clothes at a Saks Fifth Avenue store in Troy, Mich.

CURRENT JOB CFO of Boeing since December, 1998.

WHAT SHE BRINGS TO BOEING Years of experience at GM and Unisys where she excelled at plain-spoken communication that revs up factory floor workers and Wall St. analysts alike.

BIGGEST CAREER ACCOMPLISHMENT SO FAR Helping to stave off Unisys bankruptcy by restructuring its debt in 1991.

POINTERS FOR WOMEN IN THE WORK PLACE "Look at life as a pie chart. Cut out a piece for work, family, and yourself....Take the kids to work, let them know what you are doing."

PASSIONS Reading medieval history, cooking with her husband, David, a former GM Europe executive. "I do the vegetables. He does the meat."

FASHION FETISH Hermes scarves.

TV HABITS Keeps CNN on while taking morning shower.

FAMILY Married with two teenaged children from a previous marriage. Three adult step-children.

Debby for that." Hopkins' team is making a full court press to measure such benchmarks of performance as how quickly each production line goes through its inventory or how many man-hours it takes to build a plane. "If you can measure it, you can improve it," she says.

But first, everyone must understand the problems. That's where Hopkins' communications skills come in. Using the measurements her team has developed, she has put together a "value scorecard" that allows each Boeing unit to compare its performance with the rest. And a big part of her job now is preaching the gospel of improving efficiency to the rank-and-file. In a recent breakfast

say they were subcontracting because it was cheaper but they could never prove it cost less," says Bill Johnson, president of the International Association of Machinists & Aerospace Workers District 751. "Now we will have some accounting for how much parts cost." The improved atmosphere is one reason Boeing's unions recently voted against a strike, despite the prospect of layoffs.

It's all a long way from Hopkins' first job where, as a high school student working at the Saks Fifth Avenue store in Troy, Mich., she both modeled and sold clothes. Although she considered a career in sales, Hopkins realized she would never make big money in retailing.



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A LEG UP FOR CBS SPORTSLINE?

The Viacom deal might link it to MTV, VH1, and Nickelodeon

Mike Levy was in London on the morning he learned that the tantalizing rumor was fact: Viacom Inc. was acquiring CBS Corp. for a heady \$36 billion. Levy remembers pausing for a minute to ponder how his company, SportsLine USA, might make out as the two media giants combined—but only for a minute. “We just launched Rugby.com,” explains the sports Web-site maestro, and he needed to stay focused.

As founder of one of the Net's most visited sports Web sites, with designs on a global sports-information empire, Levy has to care deeply about rugby. Even cricket. But in the weeks ahead, his eye on sports will also have to be peeled for any changes afoot at CBS, which owns 20% of publicly traded SportsLine.

Since the launch of SportsLine four years ago, Levy, 52, has been out to topple the king of the sports Web sites: brand dynamo ESPN.com. Ask him about the rivalry, and Levy becomes General Patton. “We come in here every day to beat ESPN and beat them badly,” he says.

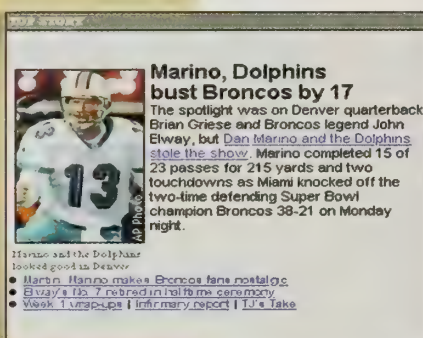
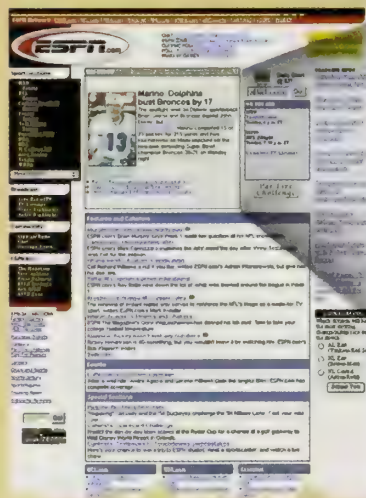
To do so, he joined forces with CBS. The deal commits the network to relentless plugging of the Web site on its highly rated sports programs—and that has helped make SportsLine second to ESPN.com in the crowded online-sports category.

Now, the Viacom deal has the potential of lifting SportsLine even higher, Web experts agree. But to the summit?

“SportsLine very quickly has proven the value of TV promotion in building a Web media business,” says Patrick

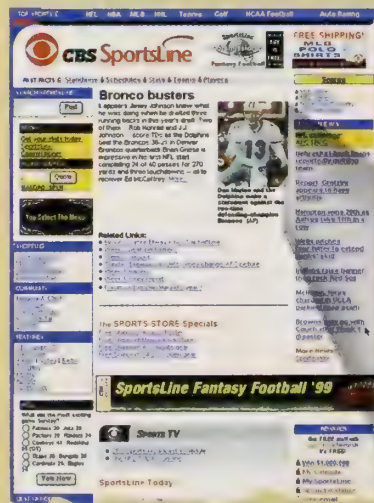
WHICH IS WHICH?

Because of similarities between ESPN.com and CBS SportsLine, ties to television shows are crucial in attracting Web visitors



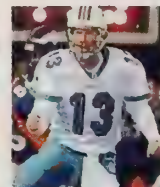
SAME GAME:

The difficulty of designing a distinctive yet easily negotiable Web page is a problem for all sports sites, including CNN.com (page EB 90).



Bronco busters

It appears Jimmy Johnson knew what he was doing when he drafted three running backs in this year's draft. Two of them -- Rob Konrad and J.J. Johnson -- score TDs as the Dolphins beat the Broncos 38-21 in Denver. Broncos quarterback Brian Griese is impressive in his first NFL start, completing 24 of 40 passes for 270 yards and three touchdowns -- all to receiver Ed McCaffrey. [More...](#)



Dan Marino and the Dolphins make a statement against the two-time defending champion Broncos. (AP)

Keane, who tracks sports Web sites for Jupiter Communications. But CBS—“the TV network of the new dead,” notes Keane—has delivered a certain kind of audience for SportsLine. Its visitors are slightly older and less affluent than ESPN.com users, according to NetRatings Inc., which in its latest survey shows free-spending Gen Xers (ages 25 to 34) accounting for 34% of ESPN.com's audience, compared with 18% for SportsLine.

If the Viacom-CBS deal goes through, those numbers could change quite a bit. “If you can use [Viacom's] MTV, VH1, and Nickelodeon to drive traffic not just to CBS programs but to Internet properties, that could be powerful,” says Keane.

“BETTER CHANCE.” But who would be watching SportsLine promos that day, during, say, a Backstreet Boys music video? The young, sure, but maybe not young sports fans. “Those audiences are tuning in for music and for other categories of entertainment totally unrelated to sports,” says Steve Zaleski,

senior vice-president of ESPN Interactive Group. “That’s our advantage we have. We’re 100% targeted to a sports audience.”

Levy says he’s not too soon to speculate about whether or if SportsLine plugs would pop on MTV or Nickelodeon. Even

he sees advantages in the Viacom deal for SportsLine. “Right now, we’re doing most of our own advertising. As we sell advertising across all platforms from network to cable to outdoor radio to the Internet, we’ll have a better chance of being included,” he says.

It could be the next step in SportsLine's march into the top tier of Internet portals. This year, it's one of the most visited Internet sites, attracting 1.5 million sports fans in July. And the

peanuts compared with the traffic generated when CBS televisions one of its marquee events, the Masters or college basketball playoffs. During the first two days of NCAA tournament basketball, it racked up 2.9 million visits.

Clearly, SportsLine

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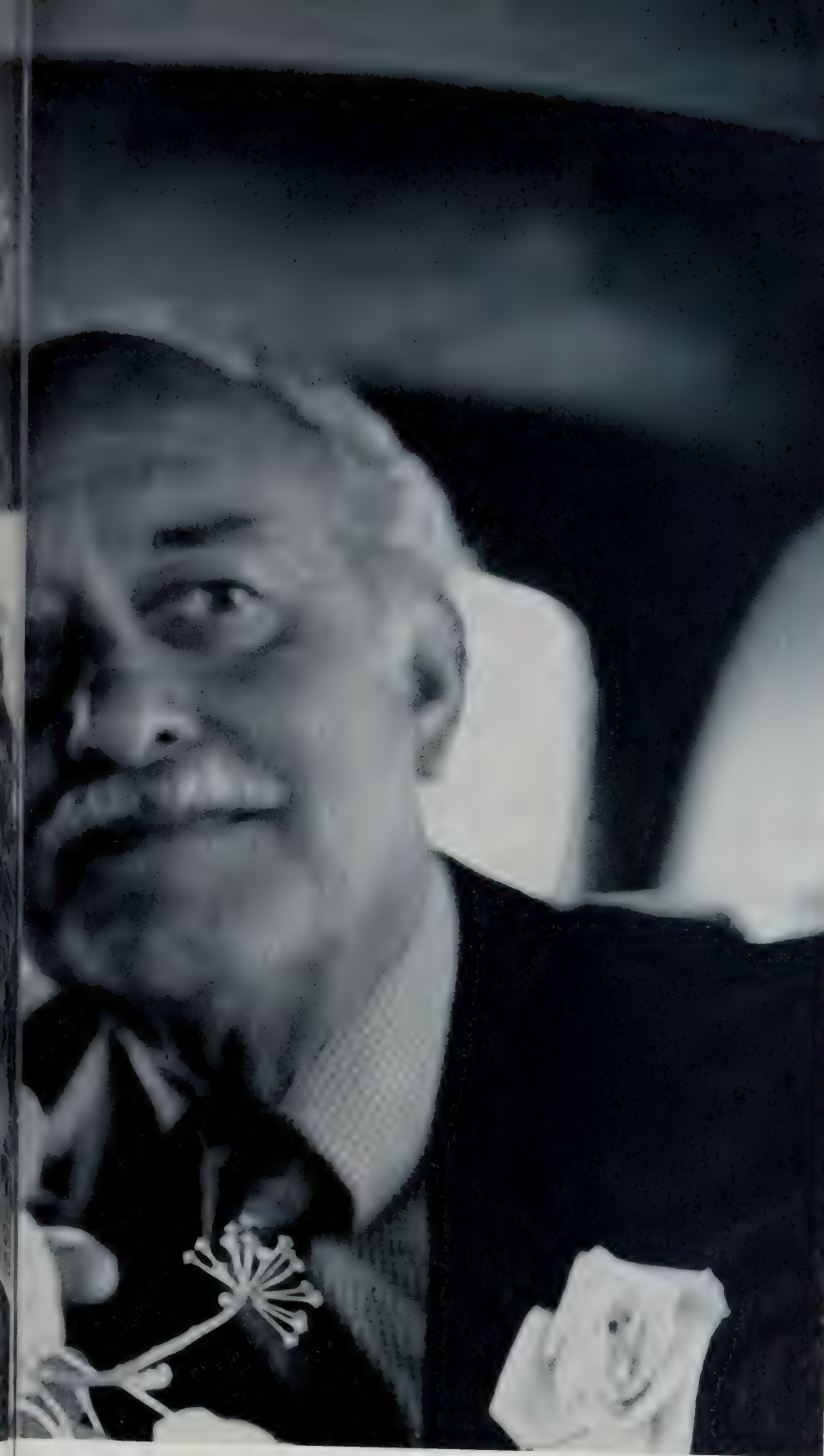
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Sports Business

Line and ESPN.com have lapped the field in the race to capture sports audiences on the Net, although others keep trying. Fox Sports, CNN and its partner *Sports Illustrated* (CNNSI.com), and *The Sporting News* have taken their brands to the Net, yet all struggle to attract sports fans. (In July, the three sites combined had fewer visitors than SportsLine.) Times Mirror Co., which owns *The Sporting News* magazine and Web site, is leaving the game. It put venerable *TSN* on the block this month, saying its Web site needed media exposure from a TV partner. There will be more startups, but they'll be in niche categories such as skiing, climbing, and extreme sports where "no one's going to build a big site," says Keane.

That leaves the two big guns, each



with its own strategy for building audience—and neither forecasting profitability for several years. ESPN.com wraps itself in a brand that all sports fans know and that most like. Its site features commentaries from columnists such as baseball insider Peter Gammons and links to the official Web sites of the NFL

CHALLENGER

SportsLine CEO Levy says: "We come in here every day to beat ESPN and beat them badly"

and the NHL. "Getting up, ESPN was always the fixture for me," says 30-year-old sports journalist Greg Garofalo of Boston, who spends 30 hours a week on ESPN's site.

SportsLine's proach is to offer more of everything from fantasy games to global sports (SportsLine Europe was launched in May) to shopping. ESPN.com has a spectacular e-commerce site, but not to compare with SportsLine's sports megamall. A spree here can range from a Hank Aaron autographed ball (\$50) to a fully assembled treadmill (\$500). SportsLine's e-commerce revenues are projected at \$15.8 million this year, says analyst Rob Martin of investment bank Friedman, Billings, Ramsey & Co., from just \$3.6 million a year ago. Overall revenues also are heading north: \$58 million this year. All that's left is for SportsLine or ESPN.com to edge into the black. For SportsLine, the Viacom connection could be the push it needs.

By Mark Hyman



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COMMENTARY

By Paula Dwyer

THE REAL TRUTH ABOUT CAMPAIGN CASH

When Christine Todd Whitman suddenly decided to bow out of the race for a Senate seat, the New Jersey Governor blamed money—or the lack of it. Whitman dreaded the thought of having to raise \$12 million in 12 months.

What a shame, cluck campaign-finance reformers, that the money chase is keeping such talented public servants from running for office. And isn't it too bad that the political system is awash in money, reformers lament, as they point fingers at Republican Presidential front-runner George W. Bush, who has upped the ante by bringing in a record \$50 million. Altogether, Presidential hopefuls raised \$105 million as of June 30 for the 2000 primaries. That puts them on pace to reach \$210 million—64% more than was raised in '96.

"TRIVIAL" HIKE. But is there really too much money sloshing around the political system? No doubt, the booming economy is making it easier to find campaign contributions. But when adjusted for the New Economy's wealth effect, the amount of campaign giving over the past few election cycles isn't even keeping pace with ballooning household assets. The rising value of stocks and bonds in personal portfolios dwarfs the jump in congressional



A MILLION A MONTH: For New Jersey's Whitman, the bill was too steep

campaign giving. And when further adjusted for increases in such factors as voting-age population and the cost of buying TV time, the growth in campaign donations looks minor. "The increase is trivial considering what's at stake," says John R. Lott Jr., a Yale University visiting scholar who studies campaign giving.

ELECTION 2000
THE MONEY CHASE

Putting fund-raising figures in a New Economy context is like viewing those old budget deficits as a percent age of GDP: As the economy grew, budget shortfalls became less and less worrisome. The \$208 billion '83

deficit, for example, came to 6.1% of GDP. A decade later, the '93 gap was even higher at \$255 billion, but only 3.9% of GDP. In the same vein, the gross amount of campaign contributions is less of a worry when viewed next to the tremendous growth in personal wealth.

So is the campaign-finance-reform movement misguided? Absolutely not. But the focus needn't be on the total amount of money going into elections. Rather, it should be on the fact that business execs and other groups in search of special favors are the source of nearly all contributions and are able to use that leverage to skew government actions in their favor. The House already addressed part of the problem when it voted 252-177 on Sept. 14 to ban soft money—unlimited donations that are supposed to go to

Less Obscene Than It Seems

The amount of campaign money going to Presidential and congressional hopefuls is insane, right? Maybe not, once you adjust the numbers for the New Economy's wealth effect. In fact, the rise in the value of stocks and bonds in household portfolios dwarfs the rise in campaign giving.

- Increase in value of stocks & bonds in household assets, 1990-98: **219%**
- Increase in value of household assets, 1990-98: **71%**
- Increase in contributions to congressional candidates, 1990-98: **57%**
- Increase in hard-money contributions to parties, 1990-98: **59%**
- Increase in contributions to Presidential candidates, 1991-99: **156%**
- Increase in soft-money contributions to parties, 1992-98: **161%**

DATA: FEDERAL RESERVE, FEDERAL ELECTION COMMISSION

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political parties but that increase fit individual campaigns. And Congress can take several other steps, including giving donors a tax credit of up to \$1,000 to broaden the contribution base and get out of the grip of special interests. Further, Congress could raise the \$1,000 cap on annual donations to \$3,000 to reduce the amount candidates spend raising money.

Then maybe Congressional funding will catch up with the New Economy. In the 1989-90 election cycle, House

The number of voters has zoomed, and the cost of TV advertising to reach them

ate candidates received \$428 million from individual donors. Eight years later, congressional candidates took in \$674 million, for a 57% increase. But in the same period, according to the Federal Reserve Bank of New York, the value of household assets jumped a slightly higher 70%, from \$20 trillion to \$36 trillion. And the value of stocks and bonds in households rose 219% from 1990-98, making the amounts that went to House and Senate campaigns look puny.

Individual campaign contributions are a small part of the picture. Presidential primary contestants and their nominees have so far accepted fewer federal funds for general elections) more than they have track the economy. In 1991-92, Arkansas Governor Bill Clinton, President George H.W. Bush, and nine others seeking the nomination of the two major parties raised a total of \$82 million. If 13 Presidential candidates raise \$210 million, as expected by the end of this year, that's a 156% jump, about even with the 154% increase in the value of household securities between 1990 and the first quarter of this year.

Only soft money has outpaced the hard-wealth buildup. In 1992, when the soft money hole really came into use, soft money raised \$86 million. By 1998, it had grown to \$224 million, for a 161% increase, far more than the 54% increase in the value of household assets and the 122% increase in the value of household stocks and bonds in the same period.

It's not just growth in wealth that seems to be driving campaign giving, though. While household assets were appreciating nicely—by 71% between 1990 and 1998—the number of eligible voters grew by 9.5%, to 201 million. That

many more potential donors. The problem is that candidates must pay these new voters.

When campaign fund-raising is over the voting-age population, the look trifling. Had Whitman won the Senate race and raised \$12 million, for example, she would have spent \$72 apiece to reach New Jersey's voters.

BEGGING. It's also a lot more expensive to keep a modern campaign humming. The price tag for a TV ad has skyrocketed—and some 80% of campaign expenses go toward buying TV time. In 1990, for example, Karen Sheridan, an executive resident at media buyers SMC in Chicago, the cost of reaching voters with a 30-second late-night ad was \$8.50. Last year, it was \$12.85, a 50% increase. That's part of the reason candidates spend unseemly amounts of time begging for money. With primary races now costing \$5 million, incumbents and challengers must bring in \$100,000 every week for six years.

What to do? First, Congress must close the money loophole that lets fat cats skirt limits on direct giving to candidates. According to the pro-reform Public Campaign, some 95% of House members, 80% of Senate members, and almost half of Supreme Court justices have received more than \$100,000 in direct contributions since 1990.

Congress should go further. Lawmakers should broaden the base of donors, at the same time weaken the grip of lobbyists, by creating a tax credit for contributions up to \$200. As the Incumbents' thousands of political participants in campaigns, a tax credit would encourage millions more to participate. It's as easy as giving a credit on a Web site now that the D.C. matching funds for

Congress should raise the individual contribution cap of \$1,000 per election to \$2,000. That roughly correlates to the increase in inflation since 1974, when the limit was set. This way, candidates would spend more time meeting voters than time dialing for dollars. Candidates have a good story to tell. They've weakened their case by complaining about the gross amount of money can be raised. If anything, there may be too much money in the federal election system. The problem is that most of it is in the hands of industries or organizations—often not public-spirited citizens—to be part of the process.

on news editor Dwyer writes about campaign finance.

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ENERGY

TOTALFINA'S TOTALLY NEW GAME

Now it's in the same league as the supermajors

Business associates of TotalFina CEO Thierry Desmarest speak of his quiet, courteous manner and icy determination. That resolve served Desmarest well in the sometimes bitter nine-week battle for supremacy of the French oil industry. The fight ended on Sept. 13 when Elf Aquitaine agreed to be acquired by Total. Desmarest upped his initial bid for Elf by close to \$5 billion to \$49 billion but conceded very little else to rival CEO Philippe Jaffré. "This shows you can start with an unsolicited offer and come to an

amicable agreement," says Desmarest, discussing merger tactics a day after his triumph. sanctions recedes, he might also be tempted by a linkup with a big U.S. player such as Chevron Corp. The Elf acquisition "puts TotalFina in a much better position to participate in the consolidation of the industry," says Nick Davies, oil analyst at J.P. Morgan in London.

As Desmarest is quick to point out, TotalFina, with the addition of Elf, will be a formidable player. While it is less than half the size of such supermajors as Royal Dutch/Shell Group and the giants being created from the merger of

consolidation picking up steam and holders increasingly restive, the government had little choice but to give Desmarest a green light. Still, sources to the deal say the government's "share" in Elf, which will be retained by TotalFina, deterred potential foreign bidders. Jaffré says his defense, including a so-called Pac-man bid for Total, was to compensate for this absence of petition. "I am proud that I have done my duty for shareholders," Jaffré says.

He can be congratulated for getting a good price. Indeed, Desmarest will have negotiated away most of the potential benefit of the combination for Total shareholders if he only achieves the \$1.5 billion in cost cuts he is promising. But some analysts figure, Desmarest is wringing up to \$3 billion in gains, shareholders will also do well.

For Desmarest, doing deals is entirely new. He made his reputation



IN FRANCE: The company is now the country's largest

Certainly, being a master of the acquisition game is a prerequisite to success in today's fast-consolidating oil industry. With his purchases of Belgium's PetroFina last December and now Elf, Desmarest has propelled TotalFina from a second-tier company to the industry's No. 4 player in less than a year. TotalFina now boasts a market capitalization of close to \$100 billion, France's largest. But few expect the Elf takeover will be Desmarest's last big move.

Desmarest's first step will be to orchestrate a brutal restructuring likely to cost some 4,000 jobs. Once TotalFina has digested Elf Aquitaine, analysts think Desmarest may solidify the company's emerging role as a European champion by acquiring Italy's ENI or Spain's Repsol YPF. If the threat of Iran-related U.S.

Exxon and Mobil and BP Amoco and Arco, it is in the same league as these companies everywhere except North America, where Total isn't much of a factor. Desmarest says he wants to compete in a few areas rather than trying to be the "world champion everywhere."

HOT AREA. The acquisition of Elf will double TotalFina's oil production to over 2 million barrels per day. It will be the No. 2 independent producer in the Middle East and the leader in Africa, a new hot area. TotalFina's production is likely to grow 5% annually in the coming years vs. around 2% for the giants. The addition of Elf will give Desmarest the scale to improve TotalFina's returns on capital employed above its current 9%, says J.P. Morgan's Davies. But they will still likely lag returns of the biggest companies, which run around 12%.

A few years ago, the French government would likely have quashed a hostile takeover attempt against one of the country's largest companies. But with

WHAT'S AHEAD FOR FRANCE'S NEW OIL GIANT

SYNERGIES At least 4,000 job losses are likely so the group can achieve up to \$2 billion in cost cuts.

ACQUISITIONS A takeover or merger with Spain's Repsol YPF or Italy's ENI could be in the cards to strengthen TotalFina in Europe.

EXPLORATION It hopes to build its strong position in Iraq and Iran by persuading Saudi Arabia and Kuwait to open up their industry.

daring moves in some of the more controversial oil-producing countries. TotalFina is in the lead in developing oil gas projects in Iran. With Elf, it also has the fast track for projects in Iraq, where U.N. sanctions are lifted. Desmarest hopes TotalFina's growing heft will persuade Saudi Arabia, which prefers to deal with U.S. and British companies, to be more open to a French player.

But he pooh-poohs any notion that swashbuckling could lead to tension between the U.S. and France. With huge potential of the Middle East, Desmarest says, there will be "plenty of room for American and European companies." At the rate he and his counterparts are snapping up rivals, there are only going to be a handful of serious competitors anyway.

By Stanley Reed in Paris

For a Q&A with TotalFina CEO Thierry Desmarest, see the Sept. 27 issue online at www.businessweek.com.

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The pressure is on Julian Robertson to stem a tide of hedge-fund losses

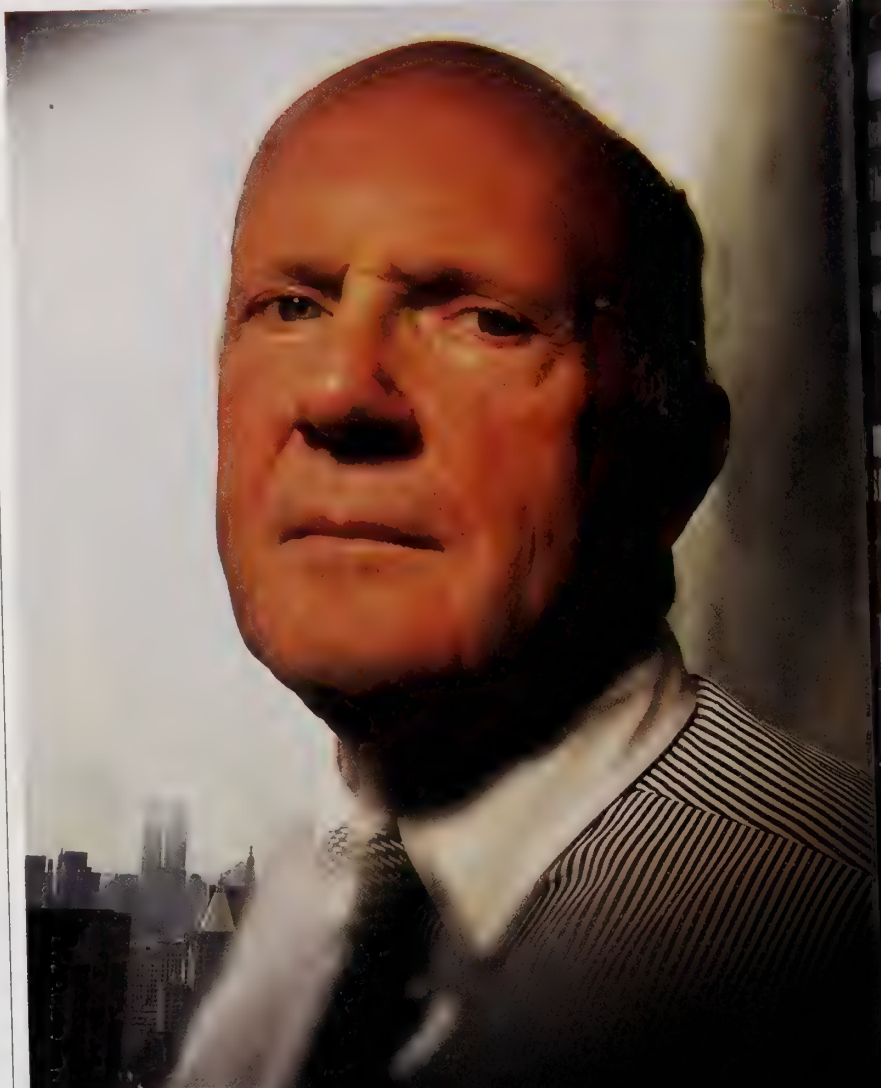
For Mark W. Yusko, chief investment officer of the University of North Carolina at Chapel Hill, Julian H. Robertson Jr. is more than just another portfolio manager—and not only because he is an alumnus and benefactor. Robertson's Tiger Management Corp. oversees \$30 million of UNC's \$800 million endowment, and for most of the past decade, Tiger has performed superbly. Robertson's six funds climbed 56% after fees in 1997 alone.

But since mid-1998, Robertson's Tiger funds have declined significantly, and even his most loyal investors are concerned. On Sept. 15, UNC's investment board reassessed its relationship with its favorite son. Tiger, Yusko says, is "really a firm under siege right now—and it's an awfully terrible situation to find yourself in." Yusko asserts—and Tiger acknowledges—that Robertson has had to sell holdings from his portfolios to meet redemptions. That has hurt Robertson's performance—thereby leading to more redemptions, and still more asset sales.

As Tiger's performance soured—falling 19% so far this year and 40% since its peak a year ago—the funds have been caught in a vicious circle of redemptions, asset sales, and poor performance. In an interview with *BUSINESS WEEK*, Tiger Chief Operating Officer Philip N. Duff confirmed that redemptions have totaled \$3.5 billion since last December and that investor withdrawals have hurt the funds by forcing Tiger to trim its portfolios.

YEN BET. Duff maintains the worst is over, and he hotly disputes using a word like "siege" in referring to Tiger. Still, redemptions remain an open question that is more than just a concern to the handful of institutions and millionaires with their money in Tiger. Persistent rumors of troubles in the hedge fund community have roiled the market. Tiger remains vulnerable to potentially troublesome withdrawals unless Robertson can stem its losses—and soon.

For Tiger, the problems began a year ago. Robertson's funds had subpar years in the mid-1990s but enjoyed healthy returns in 1996 and 1997. The rebound continued through most of 1998.



HEDGE FUNDS

TIGER IN A TAILSPIN

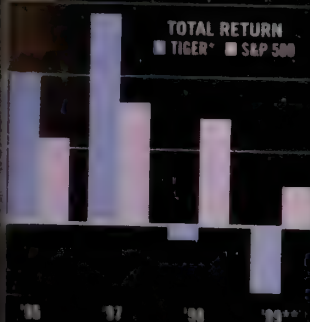
Through a combination of savvy stock picks and currency plays, Tiger was up 17% after fees through Sept. 30, 1998. At its peak in the summer of 1998, Tiger topped \$22 billion in assets—briefly rising above the Quantum group of hedge fund rival George Soros.

But an ill-fated short position in the yen sent Tiger falling 18% in October, and it has yet to recover. By the end of

1998, its funds were down 4% for year. Robertson swiftly shifted out "macro" bets on currencies—and pretty much out of the yen by early 1999. He was almost entirely in stocks most of this year, with an emphasis Yusko and others note, on "value" stocks that haven't been favored by market. The fund group's two largest holdings—U.S. Airways Group Inc.

AGED The fund's
s have shrunk to
billion—less than
what they were a
ago

ROBERTSON'S TIGER LOST THEIR ROAR?



*AFTER 20% PERFORMANCE FEE AND EXPENSES
**THROUGH SEPT. 2
DATA: BUSINESS WEEK

Management Inc.—have performed poorly this year, leading Robertson to announce in August that he was offering “a variety of alternatives to increase shareholder value” at U.S. Air. So far this year, mainly because of unpropitious stock picks, Tiger is down by nearly one-fifth. (Soros’ fund, by contrast, was up 4% in ’98 and is down 4.7% so far

this year.) Tiger’s assets have shrunk to less than half what they were a year ago—\$10.5 billion. Staff defections, long a problem at Tiger, have lately included some of Robertson’s top aides. In recent months, the losses have included the director of equities, Andreas Halvorsen and, in recent days, the man in charge of “macro” investments, Chris W. Shumway. Duff maintains that even though 20 analysts have left this year, they have not been leaving at an abnormal rate and that 14 experienced analysts have replaced them.

“HOT MONEY.” Duff is not so sanguine, however, about departures by investors. That began in December, 1998, he says, with the departure of “hot money” from short-term, largely overseas investors, and has continued ever since. Duff says that much of the money flowed from Robertson’s offshore Jaguar fund, which has been Tiger’s largest fund for several years and mirrors the performance of the five other Tiger funds.

With the exception of investors in two of Tiger’s newer funds, investors can withdraw at the end of every quarter on one month’s notice. And once performance began to lag, the cash outflow began. According to Duff, some 5% to 10% of Tiger’s net assets have been withdrawn by investors each quarter over the past year, beginning in December, 1998. The initial withdrawals were particularly heavy. Some \$2 billion was pulled out on Dec. 31, 1998, alone—with the remaining \$1.5 billion coming out this year.

The damage to Tiger was a good deal worse than it appeared to be at the time. According to Yusko, who says that he has kept in close touch with Tiger officials over the past three months, Tiger has had to trim its most liquid positions, and the withdrawals have hurt the hedge fund’s performance by reducing the amount of leverage Robertson can use—and by exposing Tiger to opportunistic trading by other participants in the market.

Duff confirms that Tiger’s performance has “absolutely” been hurt by its need to cash in assets. He agrees that some traders have taken advantage of Tiger’s need to shed assets. However, he denies that Tiger has shed only its more liquid assets, maintaining that the sales have been “across the board,” with Tiger’s portfolios reduced uniformly. He also denies that asset sales have been the reason for reduced use of leverage by Tiger.

Duff’s comments contrast with some past assertions from Tiger describing the impact of redemptions. In June, after

a broadcast report indicated that Robertson had sustained \$3 billion in redemptions, a Tiger spokesman told *BUSINESS WEEK* and other media outlets that redemptions had totaled \$1 billion and that Tiger had ample cash to meet redemptions (BW—June 28). Indeed, on June 11, Bloomberg news service quoted a Tiger spokesman as saying that Tiger “has enough cash on hand to pay out its redemptions fourfold.” The amount of redemptions that month was indeed \$1 billion, but Tiger was actually selling shares then to raise cash for the redemptions. Duff says that Tiger did not actually have “any cash sitting around,” as told to *BUSINESS WEEK* and Bloomberg, but said that was a reference to the “borrowing capacity of our portfolio.”

A policy of full disclosure, of course, is not always the best policy in the hedge fund world. Disclosure at the time of the full impact of redemptions might well have encouraged still more redemptions. Still, Tiger’s treatment of the subject in recent months may not enhance its credibility in dealing with the subject in the future, if the redemptions continue. And they may well do so, if Robertson’s performance continues to worsen. Antoine Bernheim, publisher of the *U.S. Offshore Funds Directory* and the new hedgefundnews.com database, says that as a rule of thumb, a fund whose performance declines 15% can expect to see its assets fall 25% to 30% because of redemptions.

Duff declined to discuss the quantity of redemptions that Tiger will have to pay out in September—which were disclosed to the fund at the end of August. However, he maintains that hot money has stopped flowing out of the fund. Yusko believes that Tiger is sure to rebound. But he is not so sure redemptions are a thing of the past. “Clearly, there are a large number of institutions that have withdrawn or are contemplating withdrawal” from Tiger, says Yusko. UNC isn’t one of them, however. The board voted unanimously on Sept. 15 to stick with Robertson—in expectation of a rebound.

Duff says that Tiger is thinking about requiring its new investors to keep their money in the Tiger funds longer—or, perhaps, requiring them to provide more notice before taking it out. That may put a stop to the “hot money” problem for a while. But if Tiger’s losses continue, even Robertson’s most loyal investors may start thinking the unthinkable—that heading for the exits may not be such a bad idea after all.

By Gary Weiss in New York

STOCK INDEXES

THIS POWERHOUSE IS LOSING MUSCLE

Investors are getting antsy as S&P 500 funds falter

If you're one of the millions who invests in Standard & Poor's 500-stock index funds, FYI: Your fortune may be growing a lot more slowly than you think.

The S&P 500 is up only 8.21% so far this year, compared with 28.3% last year and 31% the year before. A slowdown in the growth of some of the biggest, most popular stocks like Microsoft Corp. and America Online Inc., combined with diminishing money flows into S&P 500 funds, has pushed the index' growth back to more historical levels.

But there is good news. The index has broadened out dramatically, meaning that more than just a handful of stocks are now performing well. "This means there's more sustainability," says Jeffrey M. Warantz, equity analyst at Salomon Smith Barney.

With the Dow Jones Industrial average already up twice as much as the S&P 500, this will likely be the first year since 1996 that the S&P 500 has underperformed the Dow. "The great performance of the S&P 500 was wonderful while it lasted, but we think the trend is over," says Douglas R. Cliggott, U.S. equity strategist at J.P. Morgan & Co.

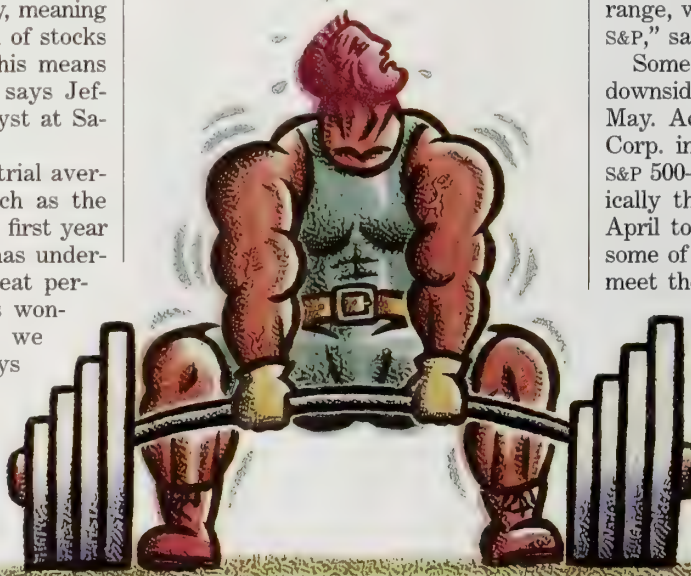
Granted, an 8% year-to-date gain may not seem so worrisome. But it may come as a shock to those who expect spectacular double-digit returns. Since its peak on July 16, \$577.8 billion of investor wealth has vanished from the S&P 500. Not only that, the average S&P 500 stock is 20% off its 52-week high.

"HUMDRUM." Rising interest rates have had an eroding effect on some of the big S&P 500 stocks. "You just haven't seen the huge gains this year, especially in some of these tech stocks," says Warantz.

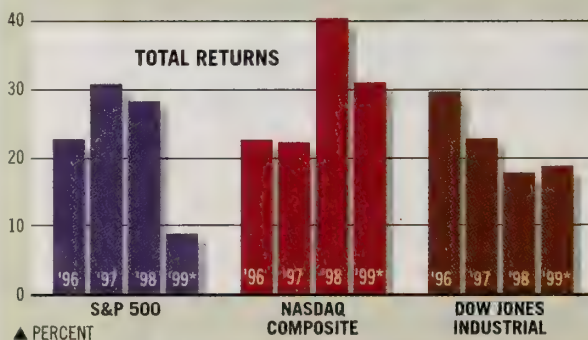
Just look at Microsoft. It is up a "humdrum" 34% this year, compared with a 115% gain in 1998. AOL is down 48% from its

52-week high. Compaq is 53% off its year-to-date high. Dell Computer and Merck & Co. are down 14% and 21%, respectively, from their year-to-date highs.

The broadening is clear. In 1998, 87% of the gain in the S&P 500 was due to the so-called Nifty Fifty stocks, including Microsoft and General Electric. But in the last year, the index' increase comes from 181 stocks, including these two. Conspicuously absent are stocks like Compaq Computer Corp. and American Home Products Corp.



THE S&P INDEX WEAKENS



Indeed, the overall market has gotten broader. In early April, four out of five stocks in the U.S. trailed the S&P 500 by 15% or more on a 12-month basis. Now, only three out of five stocks trail the S&P 500 by 15% or more. "Automatic improvement has occurred in the overall market within a very short period of time," says Warantz. One reason is that traditional value stocks, particularly the industrial cyclicals that made up most of the Dow, sprang back to life this spring. "The smokestack sector edged out some of the cutting-edge stocks," says David M. Blitzer, economist at Standard & Poor's. Small-cap and mid-cap stocks have also gotten ground.

In the face of all of this is rising 500 corporate profits. According to I/B/E/S International Inc., an early research firm, third-quarter profits are expected to rise 21.8% over last year. And fourth-quarter earnings are estimated to be up 21%. "Rising interest rates and rising profits probably mean the market will be stuck in a trading range, with a downside bias toward the S&P," says J.P. Morgan's Cliggott.

Some investors, it seems, have a downside bias toward the S&P 500. In May, according to Financial Research Corp. in Boston, investment flows into S&P 500-index funds dropped off dramatically that month—from \$4.3 billion in April to \$2.8 billion. "You can attribute some of that to IRA investors rushing to meet the Apr. 15 tax deadline, but

the key is that the market has moved away from some of the big growth stocks," says Michael Evans, an analyst at FRC. And in July, inflows were only \$1.8 billion. In July of last year, they were \$3.3 billion. Meanwhile, inflows into "total stock market" index funds that pay themselves after

Wilshire 5,000 have seen inflows decrease—with some \$4.3 billion flowing in so far this year, compared with just \$3.3 billion in 1998.

Says S&P's Blitzer: "Active fund managers should be happy with the comparisons. Even if the S&P ends up gaining 13% to 14% this year, it will still be pretty terrible compared to past three years." But in a market environment, double-digit returns of any kind may be the best investors can hope for.

By Marcia Vick
in New York

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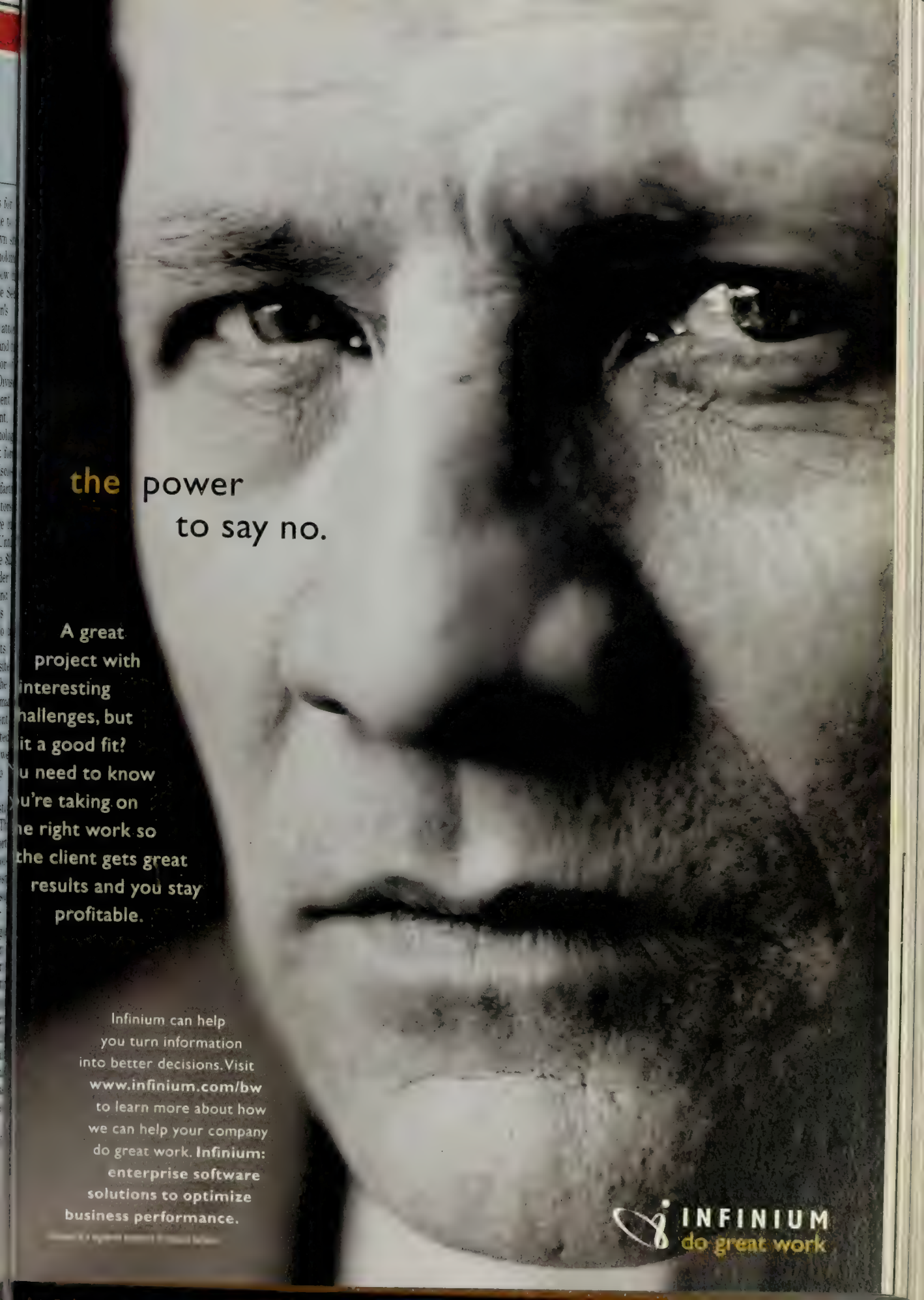
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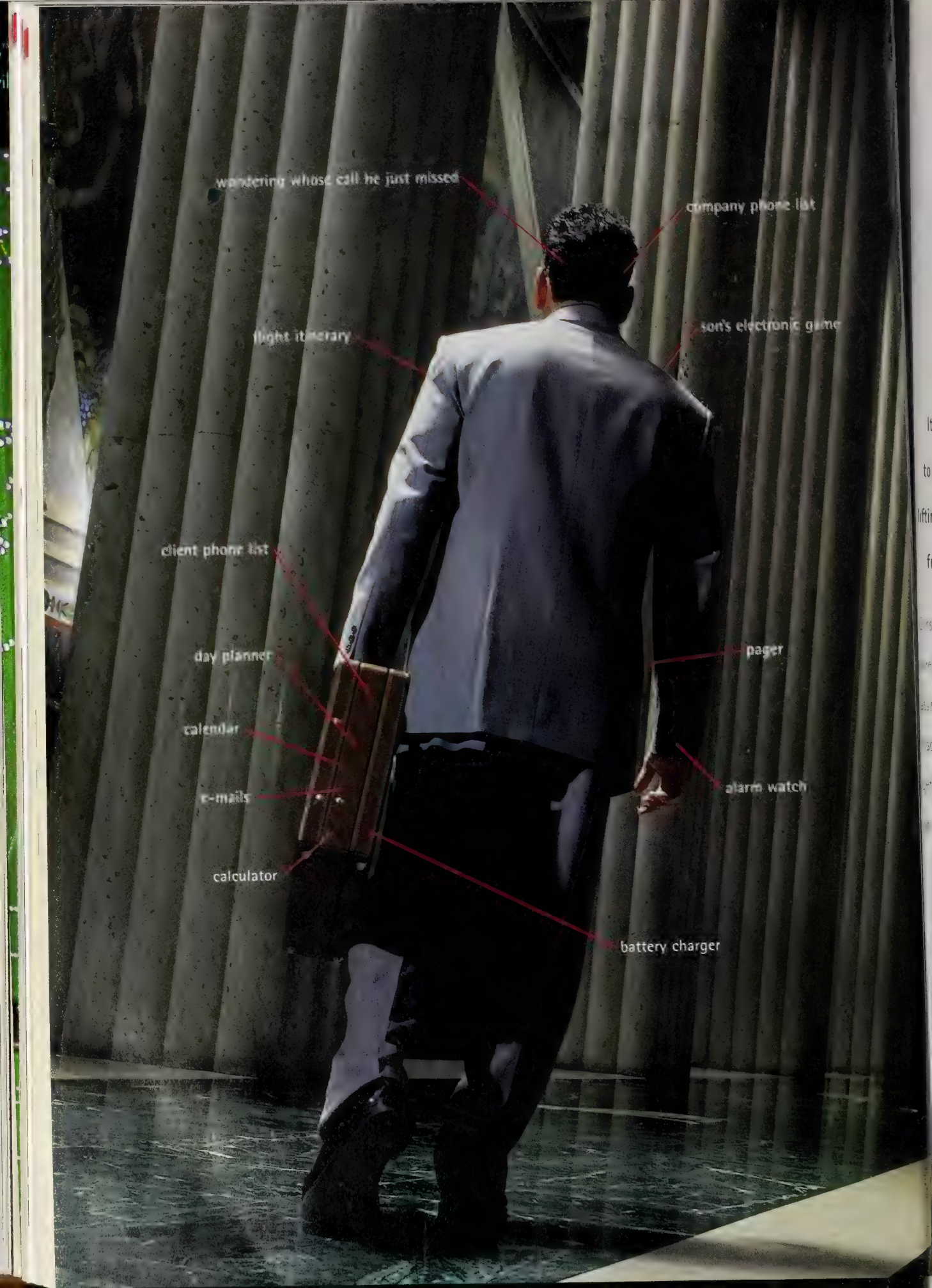


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COMMENTARY

By Peter Coy

DON'T SUBSIDIZE CASTLES BUILT ON SAND

Hurricane Floyd did more than smash real estate. It will also shake up bank accounts from coast to coast. By the time the cleanup and rebuilding are complete, all U.S. taxpayers will have anted up for Floyd through big payouts on subsidized flood insurance as well as grants and low-cost loans to people living in federally designated disaster areas.

It's admirable for people to lend a hand to neighbors who are in distress. Unfortunately, in most natural disasters, much of the public money goes to cover losses that could easily have been avoided. Government policies thwart sensible behavior. They make it too easy for people to live in beautiful but disaster-prone places such as barrier beaches, flood plains, cliff sides, tinder-dry canyons, and seismic fault zones. That's one reason why financial losses from natural disasters are growing at a rate faster than the economy itself is expanding.

FORGIVING TIMES. The solution isn't some elaborate new government disaster-relief program. Quite the opposite, in fact. In most cases, the best thing the government can do is get out of the way and let the free market do its work. That requires a well-functioning insurance market, one in which premiums are correctly aligned with risks. Subsidies make people do dumb things because they don't pay the full consequences of their behavior. "You don't build a house on train track...and you shouldn't build 10-story buildings on sand dunes," says Brett D. Hulsey, director of the Sierra Club's Protect Our Families From Floods Project.

The free-market approach to disaster preparedness and relief works when it's given a chance. In 1982, for instance, Congress passed and President Reagan signed the Coastal Barrier Resources Act, which mandated

that 1.2 million acres of vulnerable private land along the coasts would not be eligible for flood insurance or government-funded roads, sewers, or beach replenishment.

In other words, you can still build a mansion on your dune, but when it gets washed away, you won't be able to hit up the taxpayers for a new one. That discourages imprudent de-

building up their reserves and lay off more of their risk on reinsurers. So despite the state's infamous vulnerability to storms, you can still insure your home in Florida—you just have to pay more to do so. That makes sense.

In some cases, of course, the sensible thing is to move out of harm's way. Since 1993, the Federal

Emergency Management Agency has helped relocate more than 11,000 homes and businesses along the Mississippi and other rivers that are prone to repeated flooding. That's a giant step forward from the traditional practice of building higher and higher levees which inevitably break. **HINT, HINT.** Still, there's more to be done. James Lee Witt, the iconoclast director of FEMA, advocates denying subsidized federal flood insurance to people who make repeated claims and refuse to take preventive measures ranging from sealing the basements to raising the houses on stilts. A version of the proposal was introduced in the House of

Representatives this summer as the Two Floods and You Are Out of the Taxpayer's Pocket Act. Meanwhile, the Coastal Barriers Act is up for reauthorization. There is a move afoot to exempt certain areas such as pieces of Florida's Gulf Coast and North Carolina's Cape Hatteras. Instead of being weakened, the act should be expanded to cover more vulnerable areas.

It may seem cold to focus on money when hurricane victims are still picking through the rubble of their homes. In fact, though, a revamped disaster-insurance program would not only save money, it would save lives. With the proper incentives, people will choose to live in safe homes on safe ground. And everyone will benefit.

Coy is associate economics editor.



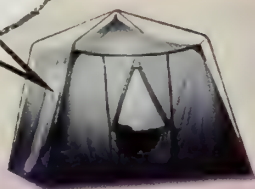
Hurricane help: By underwriting flood insurance, Washington is making it easier to live in risky areas

velopment. Quips Jacqueline Savitz, executive director of the Coast Alliance: "If we don't rebuild it, they won't come."

A free-market approach isn't just for preserving pristine beaches. It also works in places that have already been developed. Take Florida. Homeowners insurance became nearly impossible to get in the Sunshine State after Hurricane Andrew in 1992, and the state had to step in with subsidies.

However, after studying computer models of potential storm damage and reviewing property values, insurers realized that most of the state was still a good bet for subsidy-free insurance. The insurance companies have raised premiums, increased deductibles, and capped coverage while

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1. Many companies define E-business as the utilization of the Internet to transform key business activity. How do you define E-business? (check all that apply)

Conducting commerce ☐
Supply chain & vendor management ☐
Customer relations management ☐
All of the above ☐
Other ☐
(please specify) _____
None of the above ☐

2. Which of these business functions does your company provide or conduct online? (check all that apply)

Annual report ☐
Catalog ☐
Company information/profile ☐
Customer service ☐
E-mail ☐
Employee directory ☐
Maintain database ☐
Order/package tracking ☐
Sell product ☐
All of the above ☐
Other ☐
(please specify) _____
None of the above ☐

3. How important is E-business to your company's business? (check only one)

Very important ☐
Somewhat important ☐
Not too important ☐
Not important at all ☐

4. Are you personally involved in your company's Internet or Web business?

Yes ☐
No ☐

5. How important is E-business information to you?

Very important ☐
Somewhat important ☐
Not too important ☐
Not important at all ☐

6. If information on E-business is important to where do you get it now? (check all that apply)

Business associates ☐
Business magazines ☐
Conferences/seminars ☐
Consultants ☐
Industry-specific publications ☐
Newspapers ☐
Online/Internet sources ☐
Television ☐
Other ☐
(please specify) _____

II. READING *Business Week e.biz*

7. Which of the following issues of *Business Week e.biz* have you read? (check all that apply)

March 22, 1999 ☐
July 26, 1999 ☐
September 27, 1999 ☐
None of the above ☐

If none, please skip to question 13.

8. If you read *Business Week e.biz*, would you say it was:

Very interesting ☐
Somewhat interesting ☐
Not too interesting ☐
Not interesting at all ☐

9. After reading *Business Week e.biz*, did you that you: (check only one)

Wanted more information ☐
Had enough information from that issue ☐
Were overwhelmed with too much information ☐

10. After you read *Business Week e.biz*, did you (check only one)

Save section/issue for future reference ☐
Pass it onto or share with a friend or work associate ☐
Discard it ☐

**How would you describe *Business Week e.biz*?
(check only one)**

- Good information not found anywhere else ☐
A few interesting and insightful tidbits ☐
Little I don't already know ☐
Other ☐
(please specify) _____

**How would you rate the content of
Business Week e.biz?**

- It's about right ☐
It's too technical ☐
It's too simplistic ☐
Other ☐
(please specify) _____

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Have you ever visited businessweek.com?

- Yes, in the past month ☐
Yes, but longer than 30 days prior ☐
No ☐

please skip to question 16.

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days, approximately how frequently did you visit?**

- More than once a day ☐
Daily ☐
Every other day ☐
Weekly ☐
Every other week ☐
Less than every other week ☐

**Have you visited the *e.biz* area on
Business Week's Web site?**

- Yes ☐
No ☐
Don't recall/know ☐

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**Currently, *e.biz* is furnished as a feature within
the pages of *Business Week*. There is also
additional information in the *e.biz* area on
businessweek.com. Which form would you like
e.biz to take in the future? (check only one)**

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A stand-alone, separate print magazine ☐
An electronic magazine on the Web only ☐
An electronic magazine delivered by E-mail
or other personalized system ☐
A stand-alone print product, as indicated
above, supplemented by a Web site or
other electronic delivery ☐
Other ☐
(please specify) _____

V. ABOUT YOU (OPTIONAL)

17. What is your age? _____

18. Sex:

- Female ☐
Male ☐

**19. What is the highest level of education you have
attained? (check only one)**

- Some High School ☐
High School Graduate ☐
Some College (1-3 years) ☐
College Graduate ☐
Some Post Graduate ☐
Graduate Degree ☐

**20. What is your job title, e.g., director, vice
president, manager, CEO, etc?**

**21. In which department of your company do
you work? (check only one)**

- Administration/Management ☐
Advertising/Sales/Marketing ☐
Corporate Planning ☐
Engineering/Research & Development ☐
Finance/Accounting ☐
Human Resources/Training ☐
International Operations ☐
Legal ☐
Manufacturing/Production ☐
Purchasing/Procurement ☐
Technology/MIS/IS ☐
Other ☐
(please specify) _____

**22. Approximately how many employees are there
in your entire company?
(check only one)**

- 1-24 ☐
25-99 ☐
100-499 ☐
500-999 ☐
1,000-4,999 ☐
5,000 or more ☐

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A REPORT ON ELECTRONIC BUSINESS

THE HOTTEST BASH YOU NEVER HEARD OF

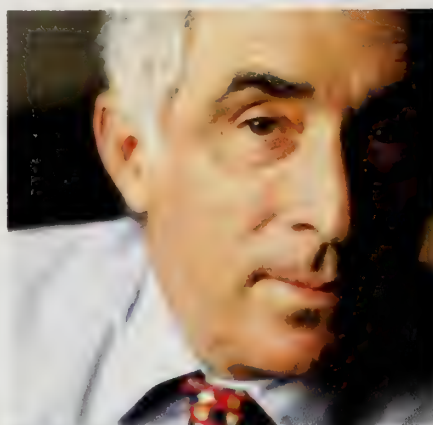
Will Forstmann's Aspen gala buy him "gravitas"?

Many people have heard of the glitzy business conference that's hosted by investment banker Herbert A. Allen. His annual Sun Valley (Idaho) confab generates enormous buzz and is well known as the place where media moguls gather to do deals and swap gossip.

Move over, Herb: There's another conference that may have an even higher wattage roster, with the added allure of being virtually unheard of outside of its elite attendees. Called the Forstmann Conference, it is a closed affair thrown by Theodore J. Forstmann, who runs the New York leveraged-buyout firm Forstmann Little & Co. Forstmann brings together business, political, and show-business bigwigs to discuss big ideas, while making sure his guests and their spouses have fun. He provides entertainment and sports pros, keeps the dress code casual, bans the working press, and requires that all conversation is off the record. All of which generates little media hype. But it pays off by attracting business opportunities and investors for Forstmann Little, while winning Ted Forstmann a huge ego boost and a lot of friends. "He's trying to buy gravitas," says one Wall Street banker. "You offer a hot meal, and the queen will come to dinner."

FRONT PAGE. This year's three-day extravaganza will start on Sept. 16 in Aspen, Colo. People who were scheduled to attend included chief executives, from Disney's Michael Eisner and American Express' Harvey Golub to Amazon.com's Jeffrey Bezos, and money managers Julian Robertson Jr. and Michael Price. Politicians included Newt Gingrich, Sam Nunn, and Nelson Mandela, South Africa's ex-president—which was front-page news in the *Aspen Daily News*.

Also on the list: Hollywood's Kevin Costner, Sean Connery, and Oprah Win-



TEDDY FORSTMANN'S EXCELLENT ADVENTURE

Some of the Forstmann Conference invitees

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SEAN CONNERY Actor
MICHAEL DELL CEO, Dell

MICHAEL EISNER
CEO, Walt Disney

OPRAH WINFREY
Talk-show host and entrepreneur



CONNERY

SPEAKERS

On Global Politics:
NELSON MANDELA
Former South African President

On Aging:
JOHN GLENN
U.S. Senator

On Risk-Taking:
RUPERT MURDOCH
CEO, News Corp.

On Terrorism:
GEORGE TENNANT Director, C.I.A.

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frey, and celebrity journalists such as ABC anchor Peter Jennings, *The Washington Post's* Bob Woodward, and conference master of ceremonies George Rose. Federal Reserve Chairman Greenspan planned to attend as a spouse to NBC reporter Andrea Mitchell confirms a Fed spokeswoman.

The locals were grumbling about the expected pileup of jets. But guests at the all-expenses-paid weekend at the scale Jerome Hotel, both for the chance to unwind and the intellectual stimulation. Says first-time guest Daniel H. C. chief executive of Hambrecht & Group: "As the Old Economy meets the New Economy on the Web, this is particularly relevant."

Forstmann hasn't always gotten glowing reviews. The 59-year-old financier is perhaps best known for an outlandish portrayal in the 1980s best seller, *Barbarians at the Gate*, as obsessed with the perils of junk bonds. But since 1978, Forstmann's firm has invested in 24 companies, and he has launched the Children's Scholarship Fund with a personal \$50 million.

The conference began as a modest affair 10 years ago. When Forstmann owned Gulfstream Aerospace Co., which he just sold in August, the shindig was a way to subtly pitch the company on the latest jet. Now, it gets Forstmann in front of corporations with pension funds to invest. And next year, as a corporate chieftain has the vision to sell, he just might just call Forstmann.

The blowout was to be a Friday panel on aging risk. The scheduled speakers were Rupert Murdoch, CEO of News Corp., a retired soldier, No. 1 Schwarzkopf, gold-medalist, and money manager Paul Tudor Jones II. After a scheduled lunch with a word from George Bush, guests were to have a session with golf pro Jim Flick, and former tennis star Andrea Jaeger. The day's scheduled sessions included medical technology, with Senator John Glenn (D-Ohio), battling terrorism. Crooner Tony Bennett was scheduled to perform while the wrap-up lunch to conclude with a state-of-the-art world speech from former

retiree of State George P. Shultz at a Pine Creek Cookhouse, overlooking a crystal stream and snow-capped mountains. Now, about that invitation, Ted

By Leah Nathans Spiro in New

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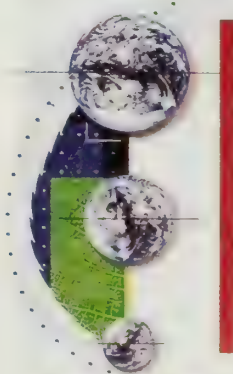
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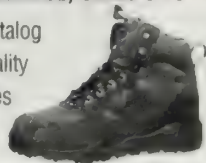
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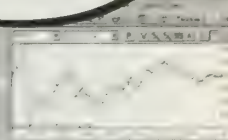


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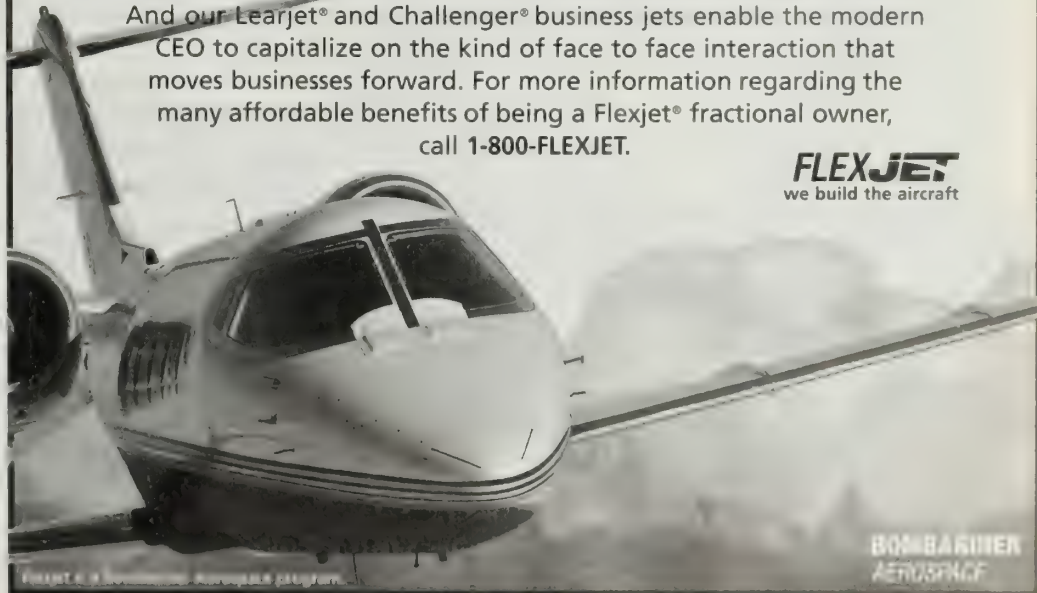
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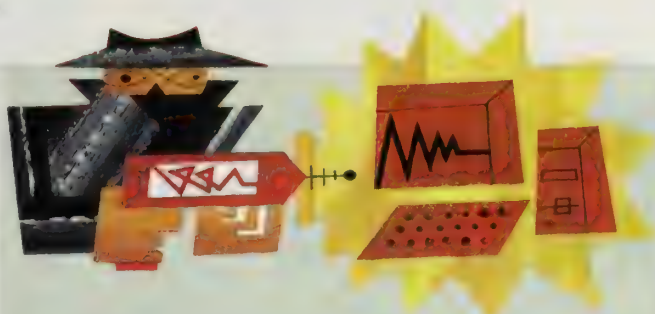
BY NEIL GROSS

NANOTUBES FRESH FROM THE OVEN

FAST SEMICONDUCTORS larger than bacteria. Microcomputers woven into clothes. These wonders are commonplace when one learns to manipulate cylinders of carbon as nanotubes.

Such molecules are 100 times as durable as steel and conduct electricity without releasing heat. But it's fiendishly difficult to attach them to substrates such as silicon—an essential step in making electronic devices.

A possible solution comes from a researcher Sumio Iijima and his colleagues at NEC and the Japan Science and Technology Corp. Iijima, who discovered carbon nanotubes in 1991, bakes nanotubes directly onto silicon, titanium, and other metals in a vacuum at 900C. Iijima hopes to test these hot nanotubes as circuits and as tiny cathodes. They could be the basis of the next generation flat-panel displays. *Irene M. Kunii*



SET PHASERS ON CRASH

THAT DEATH-RAY GUN IN THE OLD BUCK ROGERS COMICS suddenly doesn't seem so funny. Most equipment built with chips is vulnerable to beams of energy that overload the circuits with more juice than they can handle. And using recipes from the Internet, almost any garage-shop tinkerer can slap together a weapon that emits beams potent enough to zap a computer in an office across the street. Such a home-made ray gun proved lethal for two PCs during a Sept. 9 security conference in Arlington, Va. David Schriner, a retired Navy engineer, built a high-energy radio frequency (HERF) gun with \$500 worth of parts found in retail stores, including a parabolic antenna and automotive ignition coils. When Schriner pointed the beam at the PCs in a demonstration, they crashed.

The military in Russia and elsewhere have much more potent HERF weapons. Conference organizer Winn Schwartau, a security consultant and president of Interpact Inc. in Seminole, Fla., warns that "any nut case or terrorist, working at home with a few hundred dollars, could cause serious harm." Several defenses are being studied, "but it's a bitch of a problem," he says. So, apart from "radiation-hardened" chips shielded by expensive coatings, don't expect a solution soon. *Otis Port*

INNOVATIONS

■ Careside Inc., a medical diagnostic company in Culver City, Calif., has come up with a clever analyzer for bench-top blood testing. The company says a matchbox-sized plastic cartridge packed with reagents and buffers can do all the tests in a routine workup in just 10 to 15 minutes, vs. the hours or days such tests now require. With Food & Drug Administration approval, Careside plans to launch its blood analyzer in the fourth quarter of 1999.

■ On your shelf of natural elixirs, right next to the red wine, fish oil, and green tea, make room for blueberries. An Agriculture Dept. study published in the Sept. 15 issue of the *Journal of Neuroscience* found that when aging rats ate large quantities of blueberries, their short-term memory improved and some of their loss of balance and coordination was reversed. Strawberries and spinach also improved memory, perhaps owing to an antioxidant effect. But only blueberries had a correlation with restored coordination and balance.

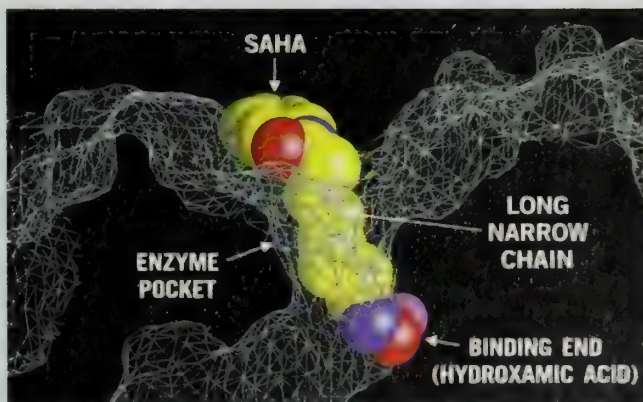
TEACHING CANCER CELLS HOW TO DIE

CANCER TREATMENTS on slashing, burning, or poisoning to combat tumors. Such assaults must be tailored to the specific type of cancer, and they rarely target the fundamental processes that turn ordinary cells into killers. But a drug called SAHA, developed at New York's Memorial Sloan-Kettering Cancer Center (MSKCC) and Columbia University, seems to be a different class.

In test-tube and animal studies, SAHA prompted prostate, breast, and blood cancer cells to cease making and resume normal duties. Aspects of the

drug's mechanism remain obscure. But in the Sept. 9 issue of *Nature*, a team of MSKCC biologists led by Nikola P. Pavletich and Michael S. Finnin published dramatic images of SAHA binding with its protein target (picture), shedding light on why SAHA might be so powerful.

Researchers believe the drug works by interfering with the activity of a key cellular enzyme. This enzyme normally keeps strands of DNA tightly coiled up so that genes along those strands can't perform tasks such as regulating cell growth. As a result, tumor



cells seem to forget who they are and forsake normal protocols, which include naturally shutting down and dying after dividing a certain number of times. By blocking the enzyme, SAHA allows these genes to do

their work. The drug may not fix the flaws that turn cells cancerous, says MSKCC President Paul A. Marks, "but it teaches cancer cells how to die." The center plans to begin human safety trials this fall.

EVOLUTION ON FAST-FORWARD

Letting nature do the heavy lifting, gene scientists are creating super new materials

Some 140 years after Charles Darwin penned *The Origin of Species*, educators, parents, and theologians are still challenging his theories of evolution. But amid all this, a new kind of evolution is on the loose. It's called directed evolution, and to hear its advocates, it is the most important development in biotechnology since the advent of genetic engineering 25 years ago. "Evolution isn't just a grand idea anymore," says Andrew D. Ellington, a biochemist at the University of Texas at Austin. "It's big business, something that makes money and products."

Directed evolution is essentially sex in a test tube. It involves subjecting a naturally occurring compound to a rapid evolutionary process, with scientists imposing some controls from the sidelines. The compound might be a protein with anti-cancer properties—promising, but too toxic to administer in large doses. By rapidly shuffling and mutating the genes that make this protein, scientists create superior versions in a matter of weeks rather than eons.

The power to derive new medicines and materials has captured the attention of Dow Chemical, DuPont/Pioneer Hi-Bred, Glaxo Wellcome, and Eli Lilly, among others. After just 10 years of experimentation, directed evolution has already borne commercial fruit: a laundry detergent enzyme from the Danish firm Novo Nordisk and an anti-tumor drug in early human trials from the San Diego-based biotech company Ixsys Inc. Within the next two years, dozens of other products are expected to

follow, from industrial enzymes to new and improved vaccines made by companies such as Maxygen, Phylos, and Diversa.

Directed evolution differs from conventional gene splicing and so-called rational drug design, in which scientists use mathematical algorithms to cus-

tomize molecules so they will perform as drugs. These techniques have produced few blockbuster drugs so far. Indeed, fast evolution doesn't depend on the recent decades of gene research and giant databases of proteins. The beauty of directed evolution is that engineers can leave the heavy lifting to nature, which functions as an extremely potent algo-

rithm. "This technology teaches you to be humble," says Russell J. Hov...

president and CEO of biotech sta...

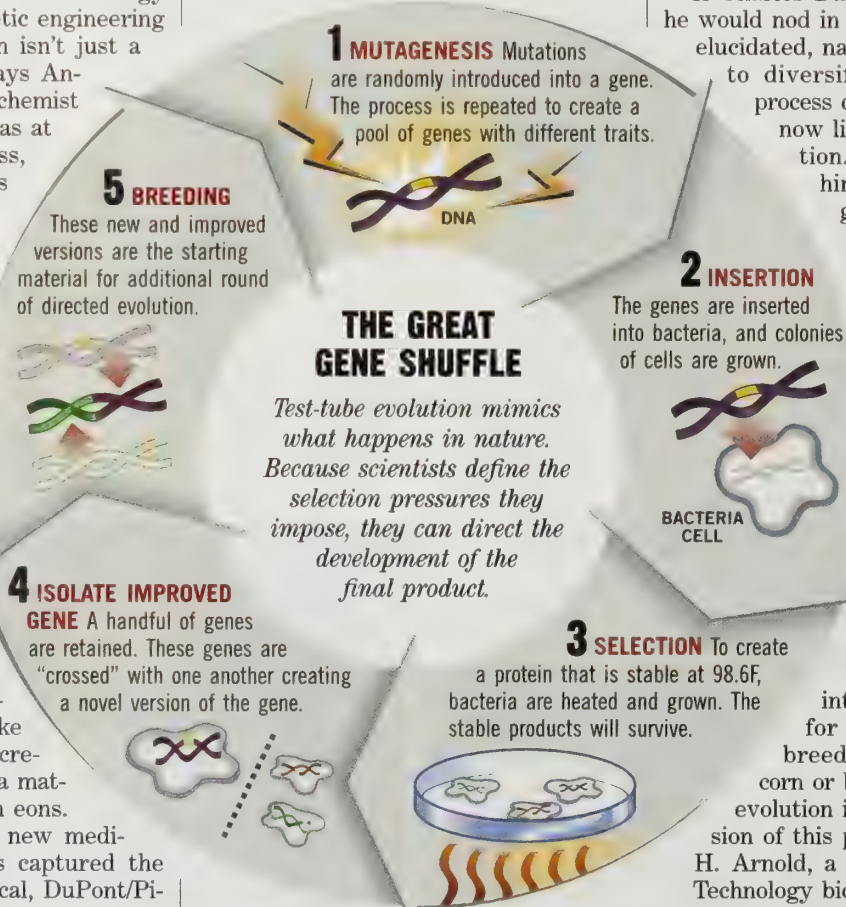
Maxygen Inc. in Redwood City, "Nature has a way of providing solutions that could never in a million years have been predicted or designed from first principles," he adds.

If Charles Darwin were alive today, he would nod in agreement. As he elucidated, nature pressures species to diversify through a brutal process of adaptation, which now link with random mutation. Most mutations hinder an individual organism's survival.

a relatively small number of mutations are "adaptations" yielding individual plants or animals that are fitter than their counterparts. Their offspring and subsequent generations plant the seeds of new species. After millions of years of this natural selection, a completely new species emerges. Farmers have been intervening in evolution for centuries, selecting breeds of higher-yielding corn or beefier cattle. "Directed evolution is just a high-tech version of this process," says Fra...

H. Arnold, a California Institute of Technology biochemist and a pioneer in the field. "It's breeding at the molecular level. Instead of doing it with whole organisms, we are doing it with particular genes or proteins."

DESIRABLE TRAITS. To orchestrate the process at the molecular level, scientists first need to choose a target gene, the "parent." Using chemical or genetic methods, they make millions of offspring genes—variants that differ slightly



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Just one or two rounds of directed evolution can increase a compound's strength 100 times

the parent in their genetic makeup. The offspring genes are introduced into bacteria or yeast. Researchers then observe the genes and pluck out those variants that display a desirable trait—say, the ones that work better at a higher temperature. Bioengineers can then take these higher-performing molecules and breed them to one another, reorganizing the genetic information to create offspring that remain active at even higher temperatures.

When breeding cattle or new strains of corn, farmers are limited to using the genetic information of just two parents. With genes, however, it's possible to mate 50 or a 100 in a single step. This way, the researchers can integrate the desirable traits from many parent genes into a single offspring gene. They can even create genes with whole new functions since the process results in combinations of DNA never before seen. By repeating the mutation and breeding steps, it's possible to strengthen the desired trait in a matter of weeks or months. Often, just one or two rounds of evolution is all that is needed to increase a compound's performance 100 times. Ixsys researchers, in one round of evolution, created an anti-tumor drug called Vitaxin that is 2,000 times as potent as the starting anti-cancer compound.

INDUSTRIAL STRENGTH. Enzymes also present compelling targets for directed evolution. Arnold's lab is focused on breeding them for use in chemical synthesis. She wants to make clean, highly selective catalysts that will save industry money and trouble by eliminating energy-intensive procedures and toxic byproducts.

Researchers at Diversa, a biotech company in San Diego, are also using directed evolution to improve enzymes, starting with exotic microorganisms isolated from extreme environments such as the hot springs of Yellowstone National Park. They claim to have improved en-

zymatic activity as much as 39,000 times. The company is currently collaborating with ZymeQuest Inc. of Beverly, Mass., to evolve enzymes that strip blood-type factors from the surface of red blood cells. According to Jay M. Short, Diversa's president and chief executive, the goal is to turn A and B blood types into type O, the universal donor blood.

At Maxygen Inc., the company that originated the molecular-breeding concept, cell wizards take a different approach. Instead of starting with a single parent gene and mutating it, they begin with a family of genes that are similar in overall structure but different in tiny yet

Chemists have spent decades trying to improve its performance under stressful conditions, such as at high temperatures or in alkaline solutions. At best, they have seen a twofold improvement.

Maxygen researchers claim even more dramatic improvements. They have shuffled the DNA sequences of subtilisins, each from a different bacterial species, and recombined them. It took them just six weeks to select through 654 offspring and identify versions that were three to four times more robust, not just at higher temperatures but also in alkaline and destabilizing solvents.

Maxygen researchers didn't just improve the enzymatic activity. In their experiments, they were also able to imbue the molecules with entirely new functions. The investigators recombined the sequences of 20 human genes that code for interferon-alpha, a protein that defends the body against viral infection. They then selected combinations that bind to human cells, but not mouse cells. After several rounds of shuffling, researchers generated a new form of the protein that could bind to mouse cells 30 times more tightly than the original version.

WHAT DO YOU GET WHEN YOU CROSS...

Biotech companies and academic researchers are conducting high-speed evolution in the test tube to create a wide variety of new products, some of which are listed here. Two of these have emerged from the lab so far: Lipolase, for detergents, and the Vitaxin antibody, which is undergoing its first human trials.

COMPOUND	APPLICATION	COMPANY
LIPOLASE	Laundry detergent	Novo Nordisk
SUBTILISIN	Laundry detergent	Maxygen/ Novo Nordisk
VITAXIN ANTIBODY	Cancer drug	Ixsys
BLOOD PROTEIN	Blood substitute	Diversa
P53 TUMOR SUPPRESSOR	Cancer drug	University of Texas, Austin
INTERFERON-ALPHA	Antiviral drug	Maxygen
T-CELL RECEPTOR	Arthritis drug	University of Illinois
INDUSTRIAL ENZYME	Biofuel cell	Office of Naval Research

specific ways. Skipping the mutation step altogether, they then breed this family of molecules—a process that amounts to chopping the different DNA sequences into pieces and splicing them back together in all possible combinations. The result of this so-called family shuffling is a highly diverse pool of new molecules.

In collaboration with Novo Nordisk, Maxygen has used this approach to improve the performance of one of the most thoroughly studied industrial enzymes of all time, subtilisin. Businesses spend about \$500 million annually to purchase subtilisin for applications that include food and leather processing and as a biological additive to laundry detergents. So important is subtilisin that researchers have mapped and patented every single one of its components.

several times stronger than the original version). "This was a shoot-for-the-experiment," says Maxygen's Howard Arnold.

As with any powerful and innovative technology, directed evolution comes with its own risks. In theory, terrorists could use the technique to create a germ perhaps 30,000 times as virulent as any that exists today.

But proponents of directed evolution say the benefits outweigh the risks. Arnold foresees a future in which this technology is used to create new crops with fewer side effects, crop varieties that improve nutrition, and chemical processes that help the environment. "It's staggering," she says. "Directed evolution is going to be the design paradigm in all areas of biotechnology."

By Ellen Licking in New York



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LYNDHURST: Gould's gothic castle was a Newport "cottage" in the film *Reversal of Fortune*

Heaven on the Hudson

The mansions of Sleepy Hollow are legendary indeed

BY TODD SHAPERA

Author Washington Irving, railroad baron Jay Gould, and oil tycoon John D. Rockefeller may have had little in common. But each found serenity about 25 miles north of New York City, in a region known through Irving's tales as Sleepy Hollow. Indeed, the land where Irving's Ichabod Crane encountered the headless horseman sparkles in autumn, and one of the area's great pleasures is a visit to the homes of the three men—Irving's Sunnyside, Gould's Lyndhurst, and Rockefeller's Kykuit.

Drive from New York to Sunnyside via the Saw Mill River Parkway to the Tarrytown exit, or take a Metro-North train from Grand Central Station or ferry from Manhattan to Tarrytown. From the train station or ferry pier, you can hail a taxi for the three-mile ride to Sunnyside, on Route 9. Irving was sent to the Hudson Valley as a young teen in 1798, to escape New York's yellow fever epidemic. It made such a lasting impression on him that he penned *The Legend of Sleepy Hollow* and *Rip Van Winkle* in his late 20s from distant shores in England. (This fall, 180 years after Irv-

ing wrote *The Legend*, three movies based on the story are scheduled to be released in theaters and on TV.) After spending his midlife in Europe, Irving settled in Sleepy Hollow in 1835, at age 48.

From the visitors' center, follow a path sh-

by sycamores and specimen trees planted by Irving to the hilltop house which overlooks the Hudson at nearly its widest point. (At the

15 miles across, the river was dubbed the Tappan Zee—or sea—by the Dutch, after the Tappan tribe that once lived and fished on its banks.)

Irving transformed his 17th-century Dutch farmhouse into what he described as "a little old-fashioned stone mansion all made up of gable ends, and as full of angles and corners as a cocked hat." Sunnyside's steep gables reflect a Scottish influence, weather vanes add a Dutch touch, and one tower is definitely Moorish. Wisdom above the front door came from mentor Sir Walter Scott's home in Abbotsford, Scotland.

Inside, Irving's stacked bookshelves and a centerpiece desk, a gift from publisher G. P. Putnam, highlight his east-facing study, the first room for visitor encounters. The "goodliest scenes of mighty Hudson," however, can be enjoyed from

Travel



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dining room, parlor, and covered porch. In the parlor, look for the portrait depicting the 26-year-old Irving in 1809, the year his fiancée, Matilda Hoffman, died of tuberculosis. He never formed a family after that, instead "living most cozily in this dear, bright little home" with older siblings and their children. "I fancy it is the happiest," he wrote, "when a man has a family for his world, books at his elbow, and his pen for amusement."

DARK SHADOWS. There's no such lightheartedness at Lyndhurst, a half-mile away. But it's worth the visit for its early Gothic-revival architecture, stained-glass windows, and wonderful grounds. Built in 1838 by famed architect Alexander Jackson Davis, Lyndhurst was made into a castle dur-

At Kykuit, John D. Rockefeller's Baptist modesty contrasts with Nelson Rockefeller's taste for nud

with its crowning eagle, sculpted gardens, stunning vistas. The world's wealthiest man fondly of the area, describing it as a place "the fine views invite the soul and where we live simply and quietly." Indeed, while Lyndhurst was being built, Rockefeller was content to live in a relatively modest home until it burned down in 1902.

Kykuit finally became home to four generations, through grandson Nelson Rockefeller's death in 1979. Surviving brothers Laurance and David still live elsewhere on the property, but the family bequeathed Kykuit to the National Trust for Historic Preservation in 1979, along with a \$40 million trust for upkeep.

FABLED FOUNTAINS. Reflecting Rockefeller's Baptist modesty, Kykuit's interior was tirelessly removed from the elaborate and done schemes often found in the homes of American millionaires," *House Beautiful* wrote in 1909. But Nelson, an enthusiastic collector, introduced some 70 pieces of modern sculpture, mostly nudes, to the estate's specially designed property. On the front lawn, Alberto Giacometti's sleek bronze *Head of a Woman* faces the granite-bowled Oceanic fountain. In the garden, Aristide Maillol's *Bather Putting Up Her Hair* sits on a pedestal between two pools and a five trickling fountains. Inside the house, the music room, Joan Miró's surrealist *Hirondelle/Amour*



PORTRAIT OF A LADY: Mrs. John D. Rockefeller watches over her domain

ing the Civil War by inventor George Merritt. Like Sunnyside, it sports asymmetrically placed turrets, gables, and spires. But the effect is much more aloof. In look and feel, Lyndhurst so resembles a Newport "cottage" that *Reversal of Fortune*, the movie about Claus Von Bulow's travails, was filmed here. Inside, Lyndhurst's opulent trappings include Louis Comfort Tiffany lamps and ornate Herter Brothers furniture similar to that in the homes of the Morgans and the Vanderbilts.

The castle is set off by rolling lawns shaded by beeches, magnolias, oaks, and maples. A fragrant linden tree, which gave the property its name, frames the house's south side. In fall, the palette is in full display, although it may be muted by this year's drought.

Kykuit (kye-cut)—Dutch for lookout—sits a few miles north of Tarrytown and two miles back from the river. Rockefeller came to the area in 1893, at age 54, when he was winding down his responsibilities at Standard Oil. But it took 20 years before completion of the six-story stone house,

(now a replica, with the original at the Museum of Modern Art in New York) mingles with Ming dynasty ceramics.

If you have time, an hour's drive north are Franklin D. Roosevelt's Hyde Park and Vanderbilt homes, as well as the Culinary Institute of America's restaurant. You'll find an abundance of country inns, where you can savor your impressions of what Irving described as the Hudson Valley's "treasures of jolly autumn." □

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dining room, parlor, and covered porch. In the parlor, look for the portrait depicting the 26-year-old Irving in 1809, the year his fiancée, Matilda Hoffman, died of tuberculosis. He never formed a family after that, instead "living most cozily in this dear, bright little home" with older siblings and their children. "I fancy it is the happiest," he wrote, "when a man has a family for his world, books at his elbow, and his pen for amusement."

DARK SHADOWS. There's no such lightheartedness at Lyndhurst, a half-mile away. But it's worth the visit for its early Gothic-revival architecture, stained-glass windows, and wonderful grounds. Built in 1838 by famed architect Alexander Jackson Davis, Lyndhurst was made into a castle dur-

At Kykuit, John D. Rockefeller's Baptist modesty contrasts with Nelson Rockefeller's taste for nude

with its crowning eagle, sculpted garden, stunning vistas. The world's wealthiest man fondly of the area, describing it as a place "the fine views invite the soul and where live simply and quietly." Indeed, while was being built, Rockefeller was content to nearby in a relatively modest home until it down in 1902.

Kykuit finally became home to four generations, through grandson Nelson Rockefeller's death in 1979. Surviving brother Laurance and David still live elsewhere on the property, but the family bequeathed Kykuit to the National Trust for Historic Preservation in 1979, along with a \$40 million trust for upkeep.

FABLED FOUNTAINS. Reflecting Rockefeller's Baptist modesty, Kykuit's interior was tirelessly removed from the elaborate and done schemes often found in the homes of American millionaires, "House Beautiful" edited in 1909. But Nelson, an enthusiastic collector, introduced some 70 pieces of modern sculpture, mostly nudes, to the architecturally designed property. On the front terrace, Alberto Giacometti's sleek bronze *Head of a Woman* faces the granite-bowled Old Dutch fountain. In the garden, Aristide Maillol's *Bather Putting Up Her Hair* sits on a pedestal between two pools and five trickling fountains. Inside the house, in the music room, Joan Miró's surrealist *Hirondelle/Amour*



PORTRAIT OF A LADY: Mrs. John D. Rockefeller watches over her domain

ing the Civil War by inventor George Merritt. Like Sunnyside, it sports asymmetrically placed turrets, gables, and spires. But the effect is much more aloof. In look and feel, Lyndhurst so resembles a Newport "cottage" that *Reversal of Fortune*, the movie about Claus Von Bulow's travails, was filmed here. Inside, Lyndhurst's opulent trappings include Louis Comfort Tiffany lamps and ornate Herter Brothers furniture similar to that in the homes of the Morgans and the Vanderbilts.

The castle is set off by rolling lawns shaded by beeches, magnolias, oaks, and maples. A fragrant linden tree, which gave the property its name, frames the house's south side. In fall, the palette is in full display, although it may be muted by this year's drought.

Kykuit (kye-cut)—Dutch for lookout—sits a few miles north of Tarrytown and two miles back from the river. Rockefeller came to the area in 1893, at age 54, when he was winding down his responsibilities at Standard Oil. But it took 20 years before completion of the six-story stone house,

(now a replica, with the original at the Museum of Modern Art in New York) mingles with Ming dynasty ceramics.

If you have time, an hour's drive north are Franklin D. Roosevelt's Hyde Park and Vanderbilt homes, as well as the Culinary Institute of America's restaurant. You'll find an abundance of country inns, where you can savor your impressions of what Irving described as the Hudson Valley's "treasures of jolly autumn." □

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Gifts with Strings Attached

Trusts can give the giver maximum control

BY ANNE TERGESEN

Paul Merriman wanted to leave money to his grandson. But while the 55-year-old Seattle investment adviser liked the idea of one day freeing 5-year-old Aaron from financial insecurity, he was also afraid of spoiling the boy. So Merriman set up a trust with a tax-free gift of \$10,000 that his grandson can't touch until the ripe age of 65. Each year after that, Aaron will be able to withdraw 7% of his inheritance, with the remainder going to a charity of his choice when he dies. "It's not going to make him rich," Merriman says of the trust, which will nonetheless reach \$4.9 million in 60 years if it compounds at 10% a year. "If he wants to be rich, he can do that on his own."

Thanks to a booming economy and a soaring stock market, a large number of Americans are now in a position to leave a sizable inheritance. But many fear their heirs may not be able to handle big windfalls. "A great many people never imagined having this kind of money," says Mary Hickok, trust counsel at Wilmington Trust in Wilmington, Del. "Now they are frightened to leave it outright to their children." So, instead of handing stock or cash over directly, many are tying the money up in a trust, a legal entity that holds and manages assets for heirs.

Although some trusts contain few, if any, restrictions on how and when money can be used, many have requirements that reflect a benefactor's values or a child's economic or health needs. "You can write in any set of rules you want," Hickok says.

With the help of a good lawyer, for example, parents afraid of assets being frittered away can safeguard their child's nest egg for retirement by preventing payouts before age 60—or even later. If your child would rather watch TV than look for a job, a trust that links the payout

to the amount he or she earns might create an incentive to work. And to encourage entrepreneurialism, some trusts allow beneficiaries to withdraw or borrow against a portion of their inheritances to set up businesses, says Joanne Johnson, a trust and estate lawyer

at J.P. Morgan's Private Bank in New York. If you're concerned the

money will be wasted on a scam, you can require accountants or attorneys to approve a business plan.

You also can cut the odds of subsidizing a drug, alcohol, or gambling habit. Jeffrey Condon, a Santa Monica (Calif.) trust and estate lawyer and co-author with his father, Gerald Condon, of *Beyond the Grave: The Right Way and the Wrong Way of Leaving Money to Your Children (and Others)* (Harper Business, \$15), recommends hiring a professional trustee, such as a bank, to oversee the funds and write checks to creditors, including landlords and doctors. Other advisers suggest appointing a sympathetic

Trusts

Tips for Setting Up Trusts

- Make sure your trust is a Crummey Trust. This lets beneficiaries draw money within a prescribed period after it is contributed, which allows benefactors to give the trust up to \$10,000 a year free of gift tax.
- Write in a spendthrift clause to protect the trust against the beneficiary's creditors, including those who sue for bankruptcy and divorce.
- Make sure the trustee of an insurance trust purchases the policy and transfers ownership to the trust.
- A trust whose beneficiary serves as its trustee should restrict the use of its principal to education, support, health, and maintenance. Otherwise, the trust's assets will become part of the beneficiary's estate.
- With a minor's trust, the parents should not have control over decisions to spend money for the child's support. Otherwise, they can be liable for income taxes on those sums.

DATA: BANK BOSTON, J.P. MORGAN



friends or relatives, serve as trustees.) That is on top of the cost of establishing the trust, which can run from \$2,500 to \$12,000, depending upon where you live and the complexity involved.

The next step is to draft the trust's terms. That means deciding when the money can be released. Often, trusts pay heirs interest on their investments annually, while distributing the principal in stages. A common arrangement gives beneficiaries a third of their share at age 30, another third at 35, and the rest at 40, when the trust terminates. The theory behind staggering payouts is that heirs get practice in handling windfalls. Accordingly, if someone blows a first installment on, say, a failed restaurant, he or she might be more conservative with the remainder, Hickok adds.

THINK TWICE. You don't have to give everything away within a set timetable. Johnson says some people give their children most of their inheritances in their 30s and 40s. But to preserve some assets for old age, they require some money to remain in the trust for the heirs' lifetimes.

Many are also establishing "generation-skipping trusts," which allow married couples to put away as much as \$2 million for grandchildren and subsequent generations, although they allow children to be named as beneficiaries as well. For single people, the threshold is \$1 million. The government exempts these sums from the 55% generation-skipping tax normally levied

upon gifts to grandchildren. (That tax is separate from the estate taxes that kick in on gifts of more than \$650,000 per person, or \$1.3 million for couples.) Because generation-skipping trusts are able to grow tax-free for generations, those who establish them should think twice before allowing their children to withdraw every penny.

When setting up a trust, consider how flexible you want it to be. If you want your progeny to have access to money whenever they need it, you might consider letting the trustee approve withdrawals. Alternately, some trusts spell out how and when money can and cannot be used—no ifs, ands, or buts—say, exclusively on college or a home.

Some choose a middle ground by allowing a trustee to deviate from the rules if someone makes a special request for money for "education, support, maintenance, or health." These are part of broad standards the Internal Revenue Service established to give trustees guidance.

Trust and estate lawyers say they advise

With staggered payouts, beneficiaries get practice in handling windfalls. One failed business venture can make an heir more cautious

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all but routine payouts. Those who want hardball can make payments contingent habilitation, Johnson says.

L.L.S. Although no rules say so, there are ings parents will never be able to control ust. A mother who hates her son-in-law nake her daughter's trust payments con- upon a divorce. Similarly, parents cannot ithdrawals if an heir marries someone ticular religious, racial, or ethnic back- "The courts have routinely thrown those ns out," Hickok says.

in drafting a trust, the choice of a trustee "If you don't have someone who will ge the responsibilities of the trust with ost integrity and objectivity, you are go- ave some problems," says Johnson. A onal, such as a trust company officer, can both objectivity and investment advice. nside, though, are annual fees that fre- amount to 1% of the trust's assets. (Fees n waived when non-professionals, such as

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clients not to be too rigid. "If you draft a trust to be flexible, it can be responsive to the evolving circumstances of your children," says Johnson. For example, if you deem that the trust cut off heirs who remain unemployed, you could punish stay-at-home parents and those who become too disabled to work. One solution is to give the trustee room to make exceptions, Hickok says.

NEST EGG. It's also a good idea to allow your progeny to keep their money in the trust longer than required. Because trusts with so-called "spendthrift" clauses are protected against creditors, they can shield a nest egg from divorce, bankruptcy, malpractice, and other legal claims.

Finally, keep in mind that no matter how many rules you put in a trust, you have no guarantees that things will go according to plan. For example, if you establish a minor's trust for a child under age 21, that child has the right to

withdraw some—if not all—of the money a 30- to 90-day period once he or she reaches adulthood, regardless of the trust's restrictions.

For those willing to contend with expenses, a so-called Crummey Trust offers protection against raiding. Crummey provisions require that an adult heir or a guardian of a minor child receive notification after each distribution is made. That sum can then be withdrawn during a 30- to 90-day window. But any money given beforehand remains off-limits under the trust's terms permit.

Whatever type of trust you settle on, be aware that most cannot be changed once established. So before you sign off, make sure the trust reflects your heirs' needs and your wishes. Then ask yourself whether the trust is flexible enough to allow for the unforeseen. No matter how well you know your heirs, you can't predict the future.

A TRUST FOR MINORS: IT GIVES YOU CONTROL



JOHNSON: Give \$1 million to grandkids now and maximize tax savings

Joanne E. Johnson, a trust and estate lawyer at J.P. Morgan's Private Bank, often counsels clients on the best way to set up trusts for their children. She shared some tips with staff editor Anne Tergesen.

Q: What are the advantages of a minor's trust?

A: It gives you control over when a child gets the money. You can actually say they don't get anything until age 50 or 60.

Q: How do generation-skipping trusts work?

A: There is a 55% generation-skipping tax on money left to grandkids. But the government gives each person a \$1 million exemption. I suggest that married clients put \$2 million into a generation-skipping trust.

Q: When should you establish one?

A: If you wait until you die to transfer the money, all you have given the grandkids is \$1 million of future value. But if you give now, you will shield your \$1 million contribution—plus any investment gains. Even though you can make your children beneficiaries of these trusts, don't allow them to

withdraw all the money. The point of this is that it can shield trust funds from gift and estate taxes forever.

Q: What other kinds of trusts do you recommend?

A: I suggest that my clients incorporate philanthropic giving into their plan. It is a way of giving children another legacy—a socially conscious legacy. You can set up a foundation and have the children run it. Even more creative is the charitable remainder trust. Income goes to a charity for a period of years and then, afterward, to the kids. You get a deduction—you can save on gift taxes, too.

Q: When do these trusts end?

A: An ordinary trust agreement ends when there are no more living relatives. But the family may want to make a donation to charity, so the trust may have gotten so small that it is no longer economically feasible to maintain. Allow the trustee to distribute the money to heirs if it is no longer viable to continue the trust.

Q: If you have more than one heir, should you divide a trust?

A: Divide the money into shares yourself. You can split it unequally. Your children feel they are entitled to an inheritance. But the people who have the money have complete control over how it's apportioned: It's their money.

STOCK IN A STOCK EXCHANGE? THINK TWICE

KE McNAMEE



They ought to be the bluest of blue chips. The New York Stock Exchange is where the elite meet in Corporate America. And the Nasdaq, while lacking the Big Board's 207-year history, views itself as the financier of the New Economy. So if these two go ahead with tentative plans to sell their own stock to the public next year, investors will snatch up those shares as solid, stable long-term investments.

Solid? Stable? Don't count on it. Investors who want a piece of the markets' action are likely to get a ticket on a cyclical roller-coaster. They'll be betting that the 18% annual growth in trading volume of the past decade can roar on. And the NYSE and Nasdaq face steep demands for capital to rebuild technology, just as new rivals are squeezing their revenues.

No one should sell the major markets short. Their names are known around the world—a branding power they hope to take global. Despite the inroads of electronic markets, each still enjoys a commanding share of trading. As public companies, rather than member-owned markets, the two could raise capital to buy or build their own electronic trading systems. More important, the shift would remove the members' chokehold

that slows decisions and stifles innovation.

But analysts trying to put a value on the exchanges are stymied. "It's not clear what business model they're offering, or even how they'll make money," says Hans Morris, a brokerage industry consultant at Salomon Smith Barney. Merrill

Lynch is evaluating IPO prospects for the NYSE but can't settle on a valuation because it can't yet tell which model works best.

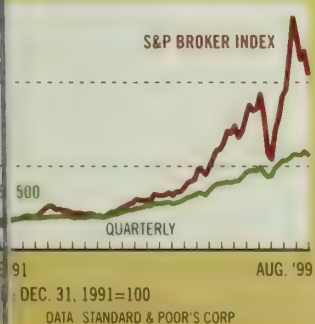
The markets' financials aren't much help. Neither reports as much detail as they require from companies whose shares they list. The numbers they do reveal aren't likely to hold up in a for-profit environment. Sales of market quotes and trading data, for example, account for 15% of the NYSE's revenues and a similar chunk of Nasdaq's. But increasingly, the markets have to share this "tape revenue" with electronic competitors.

Once the bourses report realistic earnings, what multiples should investors pay? Investment banks' and brokers' stocks have outperformed the Standard & Poor's 500-stock index (chart)—but sell for only 23.7 times earnings, versus the S&P's 32.6 p-e. The Australian Stock Exchange, which went public in October, 1998, has a p-e of 27. With those multiples, the NYSE's top value would be around \$2.7 billion. That's based on 1998 net income of \$101.3 million, which overstates earnings by including the NYSE's regulators. A more realistic estimate could be based on Nasdaq's net operating income of \$36.3 million, which would yield a top market cap of \$979 million. The bourses may get a higher p-e if they're treated as big data movers: Credit-card processor First Data sells at about 30 times trailing earnings.

LOST LOVE? What may matter more to investors than initial pricing is how the stocks behave. Buyers should expect a bouncy ride: Although trading volume has risen straight up since 1988, brokers' shares exhibit many more stops and starts than the overall market. OM Gruppen, which owns the Stockholm Stock Exchange, says its shares are 46% more volatile than those of companies it lists. Nasdaq and the NYSE say they're barred from commenting on how their shares will behave.

And what if Americans' love affair with stocks cools? The NYSE and Nasdaq insist that new financial instruments and a growing "equity mentality" among middle-class Europeans and Asians will create new worlds to conquer. In the long run, that's true. But for now, investors might find that making a market in markets is a rough ride.

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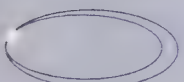
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WHY DOESN'T THIS FUND FOLD ITS HAND?



BY ROBERT BARKER

In theory, the Barr Rosenberg fund made perfect sense, but even quants can be wrong. It's time to admit defeat and return investors' money

Friday, Mar. 6, 1998, broke bright and crisp over Wall Street, perfect for hooky. I know because I was stuck inside an auditorium full of investment advisers. They had gathered at J.P. Morgan's formidable former headquarters across from the New York Stock Exchange to hear a famous financial scientist describe his brainchild, the Barr Rosenberg Market Neutral Fund.

In the world of quantitative investment research, Rosenberg is a titan, a pioneer in using fast computers to model—and control—financial risks. His services had been reserved mostly for big money institutions, for whom he managed \$7 billion. But anyone with as little as \$2,500 could get in on the new fund. Its plan: Buy hundreds of stocks and simultaneously sell short, or bet against, hundreds of others. It offered a way to invest in equities without the risk of an overall market drop. Opened the prior December, the fund's assets within months hit \$314 million, as advisers rushed to get clients in.

They would have been better off playing hooky. The fund has proved an unqualified flop (chart). A \$10,000 investment made on Jan. 1, 1998, was worth only \$8,514 by the end of last month, according to Morningstar Inc. Had you put ten grand in a risk-free, low-yielding Treasury bill, the fund's benchmark, you would have had \$10,827 by Aug. 31. A handful of rival market-neutral funds also are hurting, but none like this.

What went so wrong, so fast? To find out, I called Rosenberg's Orinda, Calif., offices. Rosenberg isn't commenting, but the fund's day-to-day manager, Will Jump, told me they're dismayed by the "awful" performance. "It's a lot more severe than we would've expected."

Just the same, the firm sees no problem with its models or computers, which scan 5,700 domestic stocks every three minutes each trading day to find those deemed cheapest and most expensive, based on such famil-

iar ratios of value as market price to profits and other proprietary measures have not lost confidence in the strategy," says. "Whenever we look at the fund, we see that we're correctly building portfolio. The valuation gap between the longs and shorts is as large as we've seen it." In words, Jump thinks it's the market, not the el, that has gone haywire.

NO SHAME. Has it? Answering that with taint would take someone smarter than or Rosenberg. But any contrarian has tempted into imagining that the market

ally will cycle around begin to size up stock way Rosenberg's do. Then, instead of ing a double dose of in the best of case fund's longs would

up, its shorts and investors be doubly enriched

That could have Yet I have an interesting proposal. Jump says the hasn't debated not close the future investors' and just head back financial laboratory

By definition, the doesn't try to e broad market

Those are the cally neutral by the portfolio of and shorts there should

no shame, no ket timer" stigma stepping out of the m

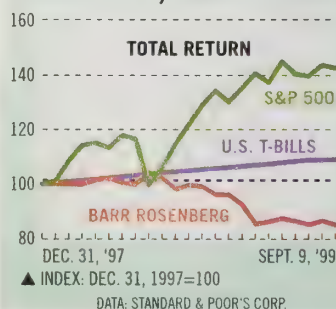
Public mutual funds rarely liquid but it's not unusual among private funds. In February, perplexed by the poor ing of one of its own market-neutral portfolio val quants at \$5 billion Numeric Investment Cambridge, Mass., did just that, giving back \$300 million. "We clearly have more search to do," Numeric President La Wheeler says.

Anxious to preserve capital, many investors the Rosenberg fund aren't willing to wait three to five years that Jump says may before the values embedded in his portfolio realized. Already, redemptions have helped the fund's assets by 63%, to \$116 million much neater it would be for Rosenberg to the initiative and return the rest. For a market neutral alternative, we'll always have the

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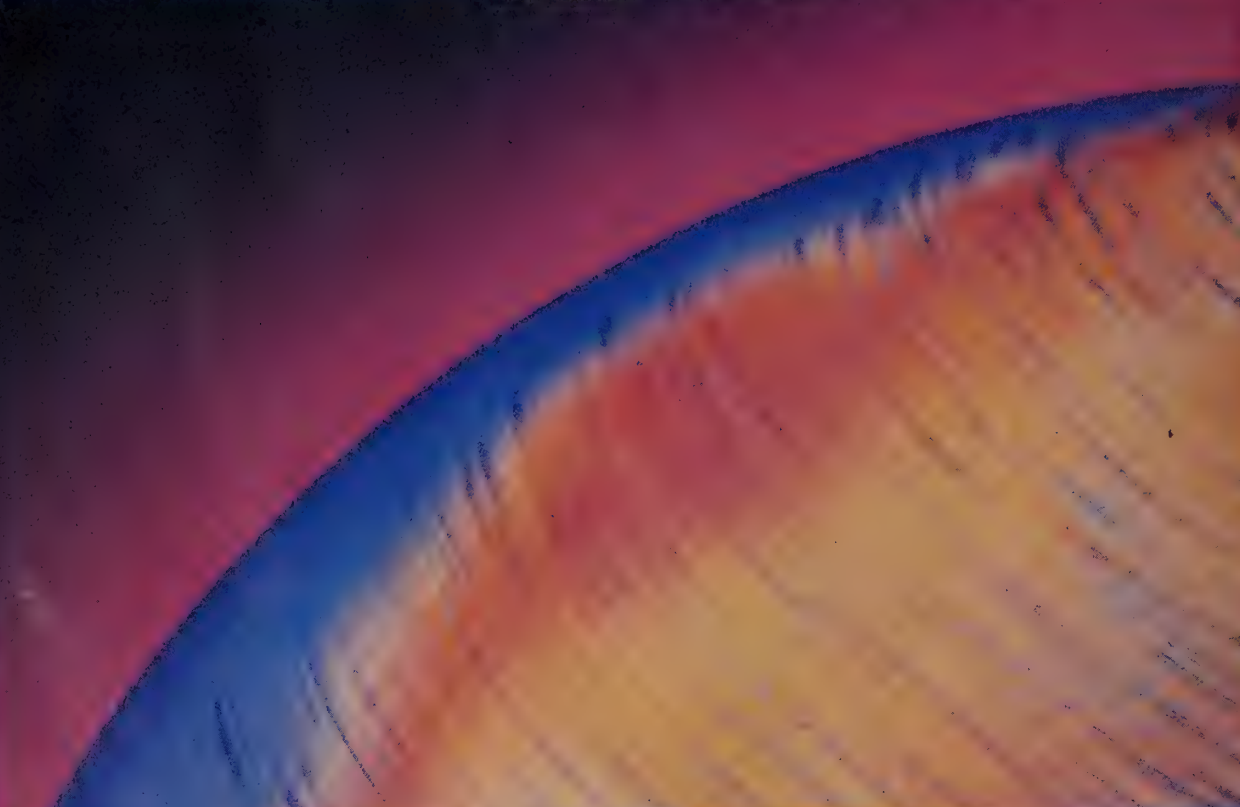
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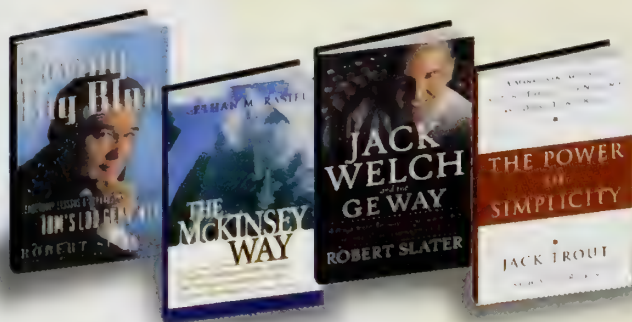
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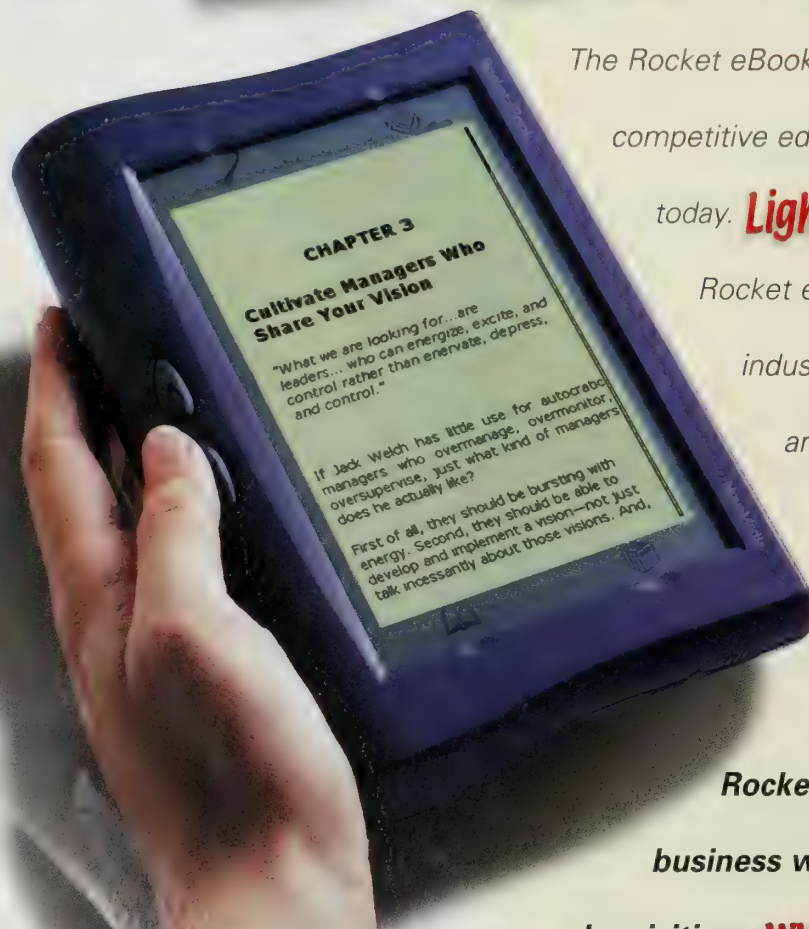
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NET: FULL OF BUZZ



G. MARCIAL

No matter how you slice it, say some savvy pros, ZDNet (ZDZ) is bound to blossom—once parent Ziff-Davis strikes a deal for this online provider of technology news. Ziff-Davis has hired Morgan Stanley Dean Witter to explore ways of boosting its stock, including selling all or part of the company. Ziff-Davis, which publishes such magazines as *PC Week*, *PC Computing*, and *PC Magazine*, spun off ZDNet in March to track its rapidly growing Internet business, but still owns 83% of ZDNet.

ZDNet was a hot IPO when it went public in March, soaring from 19 to 55 by early April. It has since dropped to 14, hit by the chill winds that have swept Net stocks.

The decline shows how undervalued it has become, says Peter Hadden of Putnam Investments, which has accumulated nearly 5% of the stock. Several parties have expressed interest in Ziff-Davis and its businesses, although the company says no "active negotiations" are going on.

But ZDNet could end up being acquired separately by a larger tech or Internet company, says Hadden. He figures it is worth 45 a share, based on rival CNET, whose market cap is \$3 billion. He notes that ZDNet and CNET are at parity in Net traffic and revenues. He expects that Tokyo-based Softbank, which owns 70% of Ziff-Davis, will retain a stake in ZDNet.

Michael Parekh of Goldman Sachs argues that, given ZDNet's "extensive library of proprietary content and strong ad relationships," ZDNet shouldn't trade at such a discount to CNET. Jamie Kiggen of Donaldson Lufkin & Jenrette has a 12-month target of 70 a share for ZDNet.

CEO Daniel Rosensweig wouldn't say whether he had offers for ZDNet. Sources say ZDNet is on the verge of signing a major alliance to launch a co-branded Web site.

NOVARTIS AND J&J MAY BE AFTER CHIRON

The buzz is getting louder about Chiron (CHIR), whose stock has soared from 18 in mid-June to 34% now—a tad shy of the 52-week high of 35 $\frac{1}{4}$ reached on Sept. 13. "Some investors are finally starting to take notice of the upside potential at Chiron," says Jim McCamant, editor of the *Medical Technology Stock Letter*. Chiron's product pipeline is full, he says, and the earnings outlook is bright. One other factor: takeover talk.

Two major drugmakers are said to be pursuing biotech biggie Chiron: Novartis, which owns 46% of Chiron, and Johnson & Johnson, which owns 50% of a joint venture with Chiron on diagnostic tests for hepatitis and HIV.

Steve Flax of Flax Investment Partners in Scottsdale, Ariz., believes that Novartis wants to acquire all of the company. Blocking Novartis' path is a standstill agreement that bars it from increasing its stake until Jan. 15, 2000. Flax says that Novartis wants to do it sooner, and the company is trying to persuade Chiron to revise the pact. However, Johnson & Johnson may be another obstacle.

Morton Cohen, chairman and CEO of Clarion Capital, thinks Johnson is bent on acquiring Chiron and that J&J may want to do a deal with Novartis to achieve its own goal. Novartis couldn't be reached for comment and Johnson & Johnson declined comment, as did Chiron.

McCamant says that Chiron's new nucleic-acid blood screening business is expected to boost revenues in 2000. He also says that sales from its Regranex drug, which is being marketed by Johnson & Johnson, should jump sharply. His target for the stock: 60.

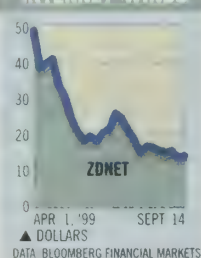
ARE BUYERS LURKING IN RITE AID'S AISLES?

What's Rite Aid (RAD) up to? Rumors have buffeted this drugstore chain ever since it put off an August meeting with analysts and announced that it was engaged in talks on "corporate transactions." In June, the company had to restate its last three years of earnings after a Securities & Exchange Commission review of its accounting practices.

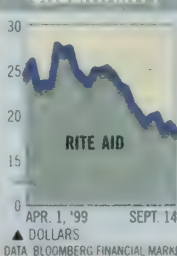
One rumor is that the likes of Safeway and Wal-Mart Stores are in buyout talks with Rite Aid. The stock's price of 18, down from 51 in January, makes Rite Aid vulnerable, says a California money manager who has been buying Rite Aid shares. Another possibility: Rite Aid, which operates about 4,000 stores, may sell some of its 300 large stores in the West. "Rite Aid is a troubled company sitting on a trove of valuable assets in an attractive industry," says John Ransom, an analyst at Raymond James & Associates. These assets, he adds, couldn't be duplicated today. Rite Aid "needs to de-leverage its balance sheet," he adds.

That is one reason why some pros believe Rite Aid may announce a deal before its meeting with analysts, which has been rescheduled for Sept. 22. Analyst Debra Levin of Morgan Stanley Dean Witter, says that if Rite Aid were sold, the price could be "roughly 25," based on recent drugstore deals. Both Safeway and Wal-Mart declined comment. Rite Aid didn't return calls.

HARD HIT BY CHILL INTERNET WINDS



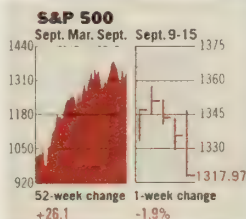
SUFFERING FROM UNCERTAINTY



SOARING HIGH



STOCKS



COMMENTARY

Stocks took it on the chin this week, despite favorable news on the inflation front. Both the consumer and producer price indexes for August showed scant price pressures. But investors focused instead on the 1.2% jump in retail sales, which showed that the economy was continuing to race ahead. The market is fearful that the Fed will raise interest rates in October to slow the economy.

Data: Bloomberg Financial Markets

U.S. MARKETS

	Sept. 15	Week	Year
Dow Jones Industrials	10,801.4	-2.1	34.6
Nasdaq Composite	2814.2	0.2	67.7
Nasdaq 100	2463.1	0.3	86.0
S&P MidCap 400	401.1	-0.2	30.0
S&P SmallCap 600	180.0	0.0	18.8
S&P SuperComposite 1500	275.7	-2.4	26.3

SECTORS

	Sept. 15	Week	Year
S&P/BARRA Growth	759.0	-1.7	32.9
S&P/BARRA Value	581.5	-2.2	20.3
S&P Basic Materials	128.3	-0.7	15.8
S&P Capital Goods	1009.1	-3.3	36.6
S&P Energy	861.9	-2.7	18.4
S&P Financials	125.8	-3.7	11.2
S&P REIT	78.6	-2.1	-4.1
S&P Transportation	635.2	-0.5	4.1
S&P Utilities	253.5	-0.1	2.6
GSTI Internet	421.5	1.0	211.0
Morgan Stanley Cyclical	571.9	-2.4	36.8
PSE Technology	643.9	-0.6	102.9

BEST-PERFORMING GROUPS

	Last month %	Last 12 months %
Defense Electronics	11.1	Semiconductors 129.1
Computer Systems	8.4	Instrumentation 117.2
Computer Software	6.6	Communications Equip. 101.7
Electrical Equipment	6.6	Computer Systems 84.3
Communications Equip.	6.4	Diversified Manufacturing 65.4

GLOBAL MARKETS

	Sept. 15	Week
S&P Euro Plus	1359.6	-0.3
London (FT-SE 100)	6067.7	-3.0
Frankfurt (DAX)	5387.2	-0.3
Tokyo (NIKKEI 225)	17,777.2	0.4
Hong Kong (Hang Seng)	13,430.6	0.6
Toronto (TSE 300)	7063.5	0.1
Mexico City (IPC)	4970.2	2.4

FUNDAMENTALS

	Sept. 14	Week ago
S&P 500 Dividend Yield	1.26 %	1.25 %
S&P 500 P/E Ratio (Trailing 12 mos.)	31.5	33.7
S&P 500 P/E Ratio (Next 12 mos.)*	23.4	23.6
First Call Earnings Revision*	5.80 %	-0.58 %

*First Call Corp.

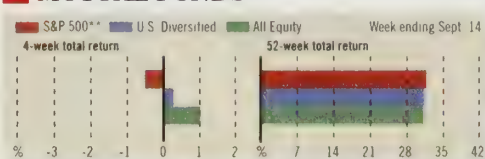
TECHNICAL INDICATORS

	Sept. 14	Week ago
S&P 500 200-day average	1297.4	1293.2
Stocks above 200-day average	37.0 %	40.0 %
Options: Put/call ratio	0.54	0.61
Insiders: Vickers Sell/buy ratio	1.11	1.34

WORST-PERFORMING GROUPS

	Last month %
Furnishings & Appliances	-21.4
Apparel Manufacturing	-17.9
Housewares	-16.6
Pollution Control	-14.8
Specialty Appr. Retailers	-12.3
Pollution Control	
Manufactured Housing	
Toys	
Metal & Glass Containers	
Apparel Manufacturing	

MUTUAL FUNDS



EQUITY FUND CATEGORIES

Leaders	Four-week total return	%	Laggards	Four-week total return	%
Japan	13.9		Financial	-6.8	
Diversified Pacific/Asia	10.0		Precious Metals	-3.3	
Technology	9.0		Mid-cap Value	-2.9	
Pacific/Asia ex-Japan	6.9		Large-cap Value	-2.8	
Small-cap Growth	4.7		Real Estate	-1.7	
Leaders	52-week total return	%	Laggards	52-week total return	%
Technology	120.7		Precious Metals	0.9	
Japan	105.3		Real Estate	8.2	
Pacific/Asia ex-Japan	86.7		Financial	10.0	
Diversified Pacific/Asia	85.5		Europe	10.8	
Communications	66.7		Small-cap Value	13.7	

INTEREST RATES

KEY RATES	Sept. 15	Week ago	Year ago
MONEY MARKET FUNDS	4.83 %	4.80 %	5.09 %
90-DAY TREASURY BILLS	4.72	4.83	4.74
1-YEAR TREASURY BILLS	5.23	5.28	4.78
10-YEAR TREASURY NOTES	5.92	5.93	4.88
30-YEAR TREASURY BONDS	6.10	6.07	5.23
30-YEAR FIXED MORTGAGE†	7.85	8.00	6.78

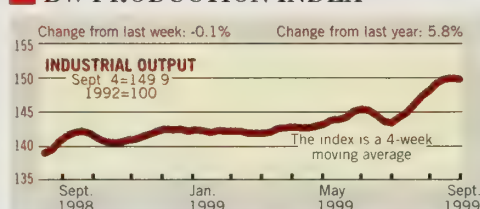
BLOOMBERG MUNI YIELD EQUIVALENT

Taxable equivalent yields on AAA-rated, tax-exempt municipal bonds, assuming a 31% federal tax rate.

10-yr. bond 30	4.92 %
GENERAL OBLIGATIONS	4.92 %
TAXABLE EQUIVALENT	7.13
INSURED REVENUE BONDS	5.07
TAXABLE EQUIVALENT	7.35

†BancQuote, Inc.

BW PRODUCTION INDEX



Information on each of the index components is at www.businessweek.com.
BW production index Copyright 1999 by The McGraw-Hill Companies

The production index dipped in late Sept. 4. Before calculating the four-week moving average, the index fell 0.2%, to 149.6, from 149.9. True production dropped after seasonal adjustment. Output of steel, autos, electrical equipment, and lumber were down, but freight traffic also rose, and the U.S. Department of American Railroads noted that it recorded its third-largest weekly increase for intermodal freight.

THE WEEK AHEAD

INTERNATIONAL TRADE Tuesday, Sept. 21, 8:30 a.m. EDT ▶ The U.S. trade deficit for goods and services likely narrowed only slightly in July, to \$23.6 billion from a record-shattering \$24.6 billion in June. That's according to the median forecast of economists questioned by Standard & Poor's MMS, a division of The McGraw-Hill Companies. Exports, which rose just 0.5% in June, are expected to post another small gain. And imports probably fell back a bit in July after jumping 3.9% in June. The soaring trade deficit subtracted nearly 1.5 percentage points from economic growth in the second quarter. Although the trade gap is expected to narrow a bit in the second half,

any additional growth the smaller deficit gives will be very small.

FEDERAL BUDGET Wednesday, Sept. 22, 2 p.m. EDT ▶ The Treasury Dept. is likely to report a budget deficit of \$9.3 billion in August, says the S&P MMS survey. That's little changed from the \$11.2 billion gap of August, 1998. For fiscal 1999, which ends in September, the federal budget remains on track to total a surplus almost double the \$69.2 billion of 1998.

BEIGE BOOK Wednesday, Sept. 22, 2 p.m. EDT ▶ The Federal Reserve Board will release its assessment of regional economic activity as

reported by its 12 district banks. According to S&P MMS, only about 8% of the economists surveyed now expect the Fed to raise short-term interest rates at its policy meeting on Oct. 5. That percentage might change at the Beige Book, which is prepared in advance of each policy meeting, contains information on whether excess demand is tightening labor markets further and raising wages.

BusinessWeek ONLINE

For more investment data and the components of the production index, visit www.businessweek.com.

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THE PROSPERITY GAP

For anyone coming out of high school, college, or even prison these days, the best job opportunities in generations are available in the U.S. Thanks to the New Economy, a 101-month expansion has so tightened job markets that even those at the very bottom of the economy are being drawn up into a vortex of national prosperity. The educated offspring of suburban Baby Boomers are getting terrific first jobs at salaries that often make their parents gasp. Inner-city kids, even those without high school diplomas, are earning more than they or their parents ever dreamed, and the unemployment rate for blacks is the lowest ever measured. Upward mobility is working again in America, and the once-popular sociological wisdom about a "culture of poverty" is being disproved by the dynamics of a high-tech, global New Economy.

But there is also a new asymmetry to American prosperity (page 91) that could have troubling political consequences. A gap is opening between those doing well and those doing much better. The divide runs right down the crack between the Old and New Economies. People working in information industries—software, media, financial services, consulting, computers—have seen their average real wages rise 11% since 1994 (not counting options and capital gains), while real wages for everyone else are up only 3%. For people at the bottom with a good first job that allows them to buy a house (a record 67% of Americans own their own homes), a prosperity gap may not matter now. But it could soon.

It all depends on the transformative power of the New Economy. Right now, information industries are pulling ahead of the rest of the economy. New Economy companies have higher productivity than Old Economy ones, make more profits, and—this is critical—pay significantly higher salaries plus options. The stock market tells the story. A rising share

of the profits made in Corporate America is being grabbed by New Economy companies. The Nasdaq, much more pure New Economy play, is up nearly 30% for the year, nearly three times as much as the broader Standard & Poor's 500-stock index and twice the Dow Jones industrial average.

This could change fast. No one really knows how much the Old Economy will make it across the high-tech divide, or how fast it will happen. Old brick-and-mortar companies such as Office Depot, Barnes & Noble, and Charles Schwab are transforming themselves into Net companies capable of creating the kind of efficiencies that are common to New Economy enterprises. How many will follow? Who will have the courage to cannibalize their distribution systems, displace shareholders, and leap to the Net? No one really knows.

But migrations will help. A brick-to-click migration is sending a horde of experienced managers and just-out-of-college kids into New Economy companies as they seek far higher compensation and the thrill of being on the edge of something new. A smaller, yet significant, click-to-brick migration is also taking place, as Old Economy companies use the talent to make them Net-savvy, often paying big salaries and options to get them there.

The prosperity gap is a new phenomenon of unknown magnitude and scope. As long as the economy is powering ahead, providing jobs and mobility for nearly all, it may not matter. But come the inevitable recession—or a sharp stock market decline—the gap could play political havoc, sharply dividing Old and New Economy populations. The grim specter of Buchanan running on a Reform Party platform of protectionism, isolationism, and nationalism is just a faint glimmer of what may come. Better to focus policy now on promoting the New Economy and hastening its integration with the

E-HEROES GET THEIR 15 MINUTES

If there's any one thing that holds true for the e-biz world at this moment, it is that dot.com heroes come and go—and fast. The zigzag of Net business is dizzying. The openness of the Web, the low cost of entry, and the continuously changing commercial landscape make for a rapid-fire change of business plans. Look at the many iterations of Yahoo's and Amazon's business models. And don't forget how many hot e-biz companies have been gobbled up and lost their independent identities in the past 12 months alone. No wonder the cast of e-biz pacesetters is constantly changing.

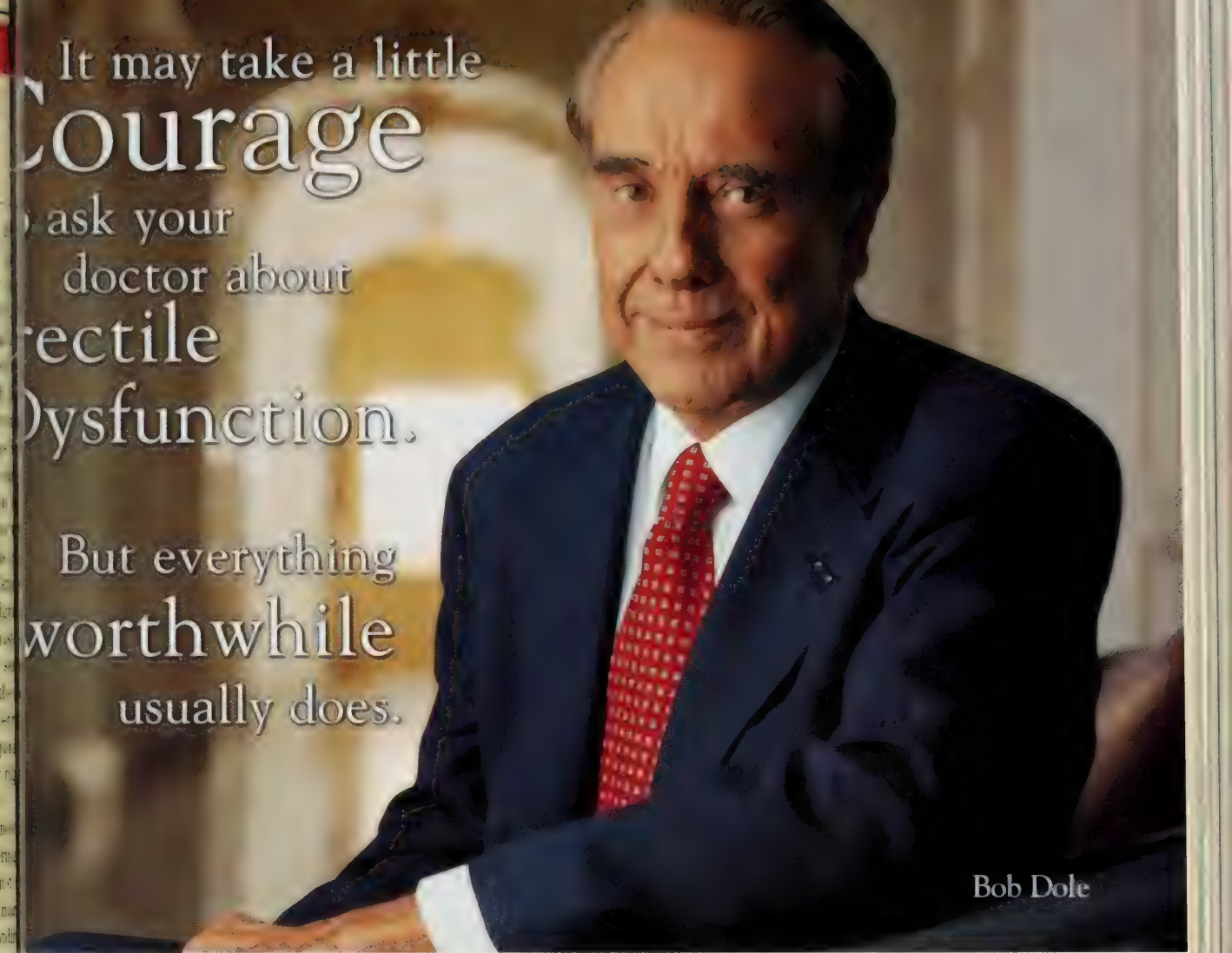
So, quick—before the list morphs before your very eyes, take a look at BUSINESS WEEK's new e.biz 25 (page EB 24). It's full of surprises, from the high-tech plumbers who provide the pipe for the Net, such as Cisco Systems' John Chambers, to reborn marketers, such as IBM's Lou Gerstner,

who gave a new identity—and source of profits—to a computer giant via electronic commerce. Priceline.com's Michael Walker made the list, as did America Online's Stephen H. Case and Amazon's Jeffrey Bezos. Bankrollers John Doer, Kleiner Perkins Caufield & Byers and Masayoshi Son of Softbank are there, plus eBay's Margaret Whitman.

But who will be back next year? Microsoft's Expedia is giving Priceline its first taste of serious competition (maybe this will get Bill Gates on next year's 25 list). Amazon.com Inc. is piling into eBay's auction business. Day traders appear to be flagging, challenging E*Trade Group's Christos Cotsakos to remain successful. And so it goes. Unlike the computer industry, there is no center of gravity as yet on the Net. Leadership is spread and ever-changing. Is this a fun era to be an entrepreneur, or what?

It may take a little
Courage
to ask your
doctor about
erectile
dysfunction.

But everything
worthwhile
usually does.

A portrait of Bob Dole, an older man with a receding hairline, wearing a dark blue suit, white shirt, and a red tie with a small white pattern. He is looking directly at the camera with a slight smile.

Bob Dole

When I was diagnosed with prostate cancer, my first concern was ridding myself of the cancer. But I was also concerned about possible postoperative side effects, like erectile dysfunction (E.D.), often called impotence. I asked my doctor about treatment options.

I'm speaking out now in the hope that men with E.D. will get proper treatment for a condition that affects millions of men and their partners.

E.D. cases are associated with physical conditions or events, like the prostate cancer surgery I underwent. The most common causes of E.D. include diabetes, high blood pressure, spinal cord injury, or surgery for the prostate or colon. E.D. can also be associated with smoking, alcohol abuse, or psychological conditions such as anxiety or stress.

The good news is that many effective treatments are available for E.D. But the important first step is to talk to your doctor. Together, you and your doctor can decide which treatment is best for you.

It's up to you to get the treatment you need for E.D. My advice is to get a medical checkup. The best way to get educated about E.D. and what can be done to treat it. It may take a little courage, but I've found that everything worthwhile usually does.

For more information about erectile dysfunction, please call 1-800-433-4215.

GET EDUCATED ABOUT E.D.





BusinessWeek

SEPTEMBER 4, 1999 A PUBLICATION OF THE MCGRAW-HILL COMPANIES



the internet age

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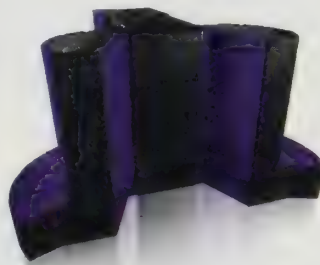
Forget megahertz.
We're talking gigaflops.



Presenting the Power Mac G4. The world's first desktop supercomputer.

What makes a supercomputer "super" is its ability to execute at least one billion floating-point operations per second. It is a staggering measure of speed known as a "gigaflop." The new Power Mac G4 is the first personal computer in the world to achieve this level of performance.

The secret of this stunning speed is the new G4 processor with its Velocity Engine—the heart of a supercomputer miniaturized onto a sliver of



What makes a supercomputer "super" is its ability to execute at least one billion floating-point operations per second. Like the new Power Mac G4.



The G4 chip incorporates the Velocity Engine—the heart of a supercomputer miniaturized onto a sliver of silicon.

silicon. Applications that tap the Velocity Engine's power typically run twice as fast as they do on the fastest Pentium III-based PCs. Common Photoshop tasks, for example, run twice as fast. And using a set of Intel's own tests, the 500MHz G4 chip was 2.94 times as fast as the 600MHz Pentium III processor. Chances

are, you've never even heard of a gigaflop before. But very soon you won't be able to live without at least one on your desk. For more information and complete specifications, visit us at www.apple.com.  Think different.

the internet

70th Anniversary
BusinessWeek

OCTOBER 4, 1999



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Up Front

EDITED BY ROBERT McNATT

CASINO SOCIETY

E-GAMBLING ON THE DOW? SHOCKING!

MOVE OVER DAY-TRADING. There's a new game in town: Internet stock market gambling. A slew of new online

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Financial wagering

casinos such as www.betat-wallstreet.com, www.beton-wallstreet.com, and www.financialbet.com let investors—er, gamblers—place Vegas-style bets on the direction of the market. At www.betat-wallstreet.com, a \$100 winning bet on the Dow Jones industrial average's daily closing price returns \$200. Lose, and it costs \$110—the \$10 extra is the vigorish. The sites

also take bets on hot stocks such as Microsoft.

These sites represent the next big trend, says Anthony Sparango, president of Go Bet, a Los Angeles company that does marketing for www.betatwallstreet.com and similar sites, which are all located offshore and also take bets on sports. There were three financial wagering sites in early 1999.

Now there are at least 10.

Behavioral finance experts say the trend reflects gambling tendencies among an increasing number of investors. "People need to remember that this is entertainment, not investing," says Jeffrey Heisler, a Boston University finance professor. For some people, it's not always easy to tell the difference. *Marcia Vickers*

CAR TALK

MAKE MINE A PORSCHE LITE

AN INTERNATIONAL CONSORTIUM of 35 steel companies is working with Porsche Engineering Services Inc. of Troy, Mich., a division of German auto maker Porsche, to develop a car that could revolutionize the automotive industry. The goal: use steel to make fuel-efficient, affordable automobiles that meet government guidelines.

The bodies of the proposed vehicles will be nearly 100% high-strength lightweight steel, weigh no more than

made of 40% recycled steel.

Best of all, these ultralight steel auto bodies won't cost more than regular autos. "The goal is to produce some very sexy-looking cars that are affordable," says E. Frank Walker, a British Steel engineer involved in the project.

One big remaining obstacle: safety. It isn't easy to make a car light and safe. Engineers plan to design the body using advanced computer programs that will optimize the whole vehicle rather than its separate parts. When will these wonder cars hit the road? Sometime after 2001, when the design is completed, the engineers hope. *Ellen Licking*

TALK SHOW "Eastern North Carolina has not experienced destruction of this magnitude since the Civil War"

—Dr. H. David Bruton, Secretary of the North Carolina Health Human Services Dept., describing the aftermath of Floyd



LABOR NOTES

SEND IN THE CLOWNS

THE GLITZY OPENING NIGHT AT New York's Metropolitan Opera House on Sept. 27 will feature the tragedy *Pagliacci*. But the black-tie audience will get an eyeful of weeping clowns before setting foot in the hall, thanks to a bitter labor dispute.

Big Labor in the Big Ap-

ple wants to unionize Met's food-service workers. So 3,800 operagoers, she out up to \$2,250 for the and gala, will be greeted 500 protesters, some dressed in Pagliacci gear, "cry over workers' \$6 to \$8 an hour pay. "The top 5% of value of the jewels worn opening night will exceed combined wages and benefits for the food-service workers for a year," says H. Tamarin, president of the 100 of the Hotel Employees & Restaurant Employees International Union (HERE).

So far, the Met hasn't intervened in the dispute between HERE and Restaurant Associates, a unit of the licily traded Compass Group. RA employs the Met's restaurant workers, 70 whom voted in February to unionize. RA wants a secret ballot. HERE charges workplace intimidation; RA denies. Sounds like a deadlock, even clowning around with change. *Joan O.*

FWAY PATROL

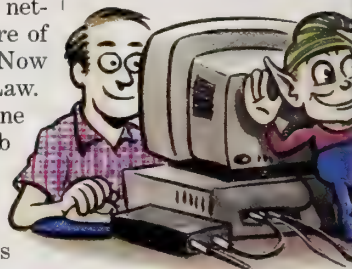
WHY E-SPEED IS OF THE ESSENCE

MOORE'S LAW SAYS SEMICONDUCTOR performance doubles every 18 months. Metcalfe's Law holds the value of a network grows by the square of the increase in users. Now get ready for Gruber's Law.

It's a way to determine the true value of a Web site or an Internet service provider (ISP), says Harry Gruber, CEO of InterVU Inc., which sells streaming video and audio services. Gruber says it's time to update Metcalfe's Law to adjust for faster PC connections. His formula: The value of an ISP or Web site is the product of how many millions of users it has and the speed of its average connection. Faster connections mean sites and ISPs can offer services such as

videoconferencing and get extra revenue from TV-like line advertising—once viewers stick around longer.

A high-speed provider could be worth 50 times more per customer than a narrowband ISP, says Gruber. T



estimate is roughly reflected in the higher market caps of high-speed ISPs such as CompuLink, vs. low-speed ones such as EarthLink. But a recent Greenfield Online survey says consumers value discounts in Web more than technical wizardry. *Timothy J. Mullar*

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— **Jack and John Gravatt**



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Community

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Up Front

PRODUCT PEEK

BYOS: BRING YOUR OWN SCOOP

AS IF KEEPING UP WITH ILLEGAL guns weren't headache enough, now the Bureau of Alcohol, Tobacco & Firearms has another worry: ice cream. Ice Cream Bar of Minneapolis has rolled out Blend's, the first truly alcoholic iced confectionery. A half-cup serving can be as high as 10 proof—5% alcoholic—depending on the flavor.

And the flavors? Whiskey & Cream, Pink Squirrel, Grasshopper, plus six others, all tasting like an indulgence from a bartender's freezer. "This is a brand-new category, a brand-new invention,"



crowds Ice Cream Bar President Daryl Orris, who's awaiting a patent on a way to prevent alcohol molecules from interacting with ice crystals. His process allows a stronger alcohol level than "flavored" (less than 0.5% booze) precursors such as Häagen-Dazs Bailey's Original Irish Cream. As a distilled spirit, Blend's must carry warnings and be sold with booze—albeit in a freezer.

As for the abuse potential, Orris says ice cream is too filling. Still, he admits his insurer is fretting about one group, "petite women, age 21 to 55," who can get a buzz faster than heavier people. Maybe everybody should get a free breathalyzer test with every pint or two they eat. *Joan Oleck*

AIR LINES

GRIDLOCK TO THE EAST

WITH CHINESE EXPORTS TO America booming, U.S. airlines are upset at how few additional weekly U.S.-China flights the Transportation

lucrative Chinese cargo business.

Transportation also wants more flights, but says that it is unlikely. The U.S.-China pact signed in April already calls for 17 new weekly flights now, plus 10 more by 2001. That's too little too late, say the carriers. FedEx, the

biggest cargo carrier in China, now ships 1.44 million pounds of cargo weekly. The company says it is missing out on millions in revenue because it can't satisfy demand. It wants six flights but only has four. Northwest, which wanted four new all-cargo flights, got one. It says it can't offer "viable" cargo service to China without them. And United is unhappy because it can't start its five new flights until 2000. But until China agrees to a change, the airlines will remain dissatisfied. *Dennis Blank*



CHINA CARRIERS: Too few flights

Dept. wrangled out of the People's Republic this spring. So Federal Express, Northwest Airlines, and United Airlines, the U.S. lines flying to China, recently asked Transportation for 15 more weekly flights. Otherwise, they say, they'll lose out on

DRAWN & QUARTERED

DO NOT ATTEMPT TO CHANGE THE CHANNEL—WE OWN ALL OF THEM. DO NOT ATTEMPT TO TURN OFF THE SET. IF YOU DO, WE WILL CUT THE ELECTRICITY. WE OWN THE POWER COMPANY. AND IF YOU TRY TO GET A DRINK OR USE THE TOILET, THERE WILL BE NO WATER. WE OWN THAT UTILITY, TOO. DO NOT TRY TO CALL FOR HELP. WE OWN THE PHONE COMPANY. SIT BACK AND ENJOY THE SHOW. NOW! WE KNOW WHERE YOU ARE.



CAR TALK

HONEY, I SHRUNK THE MINIVAN

THEY'VE BEEN COMPARED TO spaceships, bugs, even coffee-pots. But the odd-looking vehicles tooling around European roads are compact mini-



ON THE ROAD: Opel's Zafira

vans, and they've sold spectacularly since the first one rolled off the assembly lines in 1997.

Full-size U.S.-style minivans are too big for Europe's narrow streets. So carmakers have met the demand for a roomier car by stretching

out sedans into minivans which are about a meter shorter than American vans. The first was Renault's Scénic in 1997. This year, Opel rolled out the Zafira and Fiat introduced the Multipla. Peugeot, Volkswagen, and Ford are planning similar models.

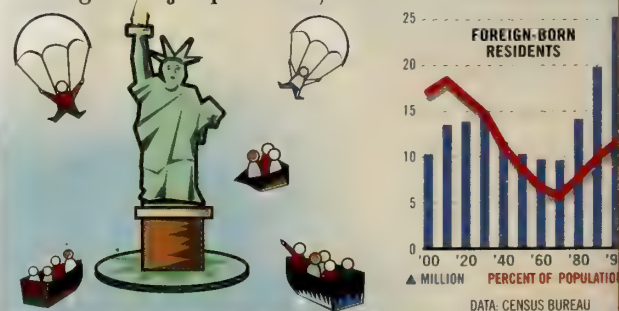
Compact van sales soared to 340,000 last year, from 40,000 in 1997, and should reach 930,000 in 2001, says John Lawson, an auto analyst at

Monmouth Smith Barney in London. Meanwhile, standard-size van sales remain about 350,000 a year. "Car makers love the compact vans because all they have to do is add a little steel and they can charge \$1,500 more," says Lawson. Americans might think they look odd, but Europeans, they're simply beautiful. *William Echik*

THE BIG PICTURE

MORE OF US ARE NOW FROM OVER THERE

Foreign-born residents made up 9.3% of the population in mid-1998. Between 1998 and 1990, the number of foreign-born jumped 27.1%, versus 7.1% for native-born.



FOOTNOTES New-media freelancers who prefer: to work independently, **33%**; to work for a company, **13%**

QUALCOMM



Here's something else we dreamed up:

You may think it's just a thin phone, but it can also access the Internet and work as your pager.* Inside, its built-in lithium-ion battery allows you to leave the phone on standby for days. And, at barely over four ounces, it also has the ability to make you forget it's in your pocket. And, since we obviously dream in color, the ~~QUALCOMM THIN PHONE~~ comes in a range of attractive shades. Further proof that what's inside your head may surprise you. Go brain go.



To connect the dots, start here.

Or here.

Or here.



Or here.

You're a kid. You connect the dots any way you see fit.

You grow up, go to school. You learn to start where they tell you to start.

Now we're telling you to start anywhere you want again. Who do you listen to?

Let's just say this. Without going outside the lines, we never would have been able to take CDMA technology (Code Division Multiple Access—you won't be tested later), ship it with 4.4 trillion security codes, adopt it for digital phones and basically change an industry.

Because of QUALCOMM, it's amazing what you can come up with when you realize your mind's a very fun place. And you should visit. Go brain go.

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THE WAY WE WERE —A GLIMPSE AHEAD

Startups are all the rage today. They capture our imagination for reasons that seem timeless. They embody the force of a new idea, a willingness to take risks, a faith in the future.

At BUSINESS WEEK, our moment came 70 years ago, in a far different era. In September, 1929, workers were commemorating Labor Day with celebrations of a new five-day workweek. The Graf Zeppelin finished circling the world in 20 days and 4 hours, encouraging executives at Goodyear Tire & Rubber Co. to start raising money for transatlantic airship lines. A bank executive, who insisted on remaining anonymous, expressed concern that people were apparently withdrawing money from their savings accounts to invest in the "speculative orgy" in the stock market. In debating what would become the Smoot-Hawley Tariff, Senator Reed Smoot insisted that neither his tariff, nor any other tariff, could have any effect whatsoever on prices. "Thus he alarmed lobbyists and perplexed simple solons, who are now wondering what a tariff is for, anyway," said BUSINESS WEEK's editors.



THE FIRST COVER...

I suspect my predecessors' sense of humor was more than refreshing. It must have helped sustain them when the stock market crashed and the nation plunged into a recession aggravated by Smoot's infamous tariff. In true startup fashion, the magazine did not turn a profit for several years.

It is fascinating to reflect on events 70 years ago in light of what we have chosen as the topic for a Special Report on our anniversary. The Internet is a disruptive technology that is both like and unlike what has gone before. In five short years, the World Wide Web is already transforming drastically the landscape of such industries as retailing, finance, and, as I am acutely aware, publishing.



...AND THE LATEST

I confess that I am as bemused as anyone by what the business world might look like in five years, much less 70. But our editors have dug into the Internet phenomenon and come up with a thorough and original analysis, rich in insights, that provides valuable guideposts to what lies ahead. At the same time, we have compiled 70 years of our covers into a graphic review of the trends that have brought us where we are.

Anniversaries give us a chance to step back for a moment and take a longer perspective. Please share that opportunity with me.

Stephen B. Shepard

Editor-in-Chief

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ON FREE SOFTWARE WARS

in Microsystems Inc.'s strategy of giving StarOffice and distributing it free is a serious threat to Microsoft, and is ironically similar to what Microsoft did to Netscape Communications. ("Free software from anywhere?" says Analysis & Commentary, Sept. 13). Netscape had a 90%+ share of the browser market, and Microsoft's response was to give away a similar product, Explorer. Today, Microsoft Office has a high market share, and Sun will give away a similar product.

Consumers will take advantage of the offer. Why not? If someone needed to apply his new business with computers and software, would he rather pay \$2,500 to buy five people Microsoft Office, or pay nothing? Someone more enterprising could buy older computers and put (free) Linux and StarOffice on them, saving even more money.

Of course, Microsoft will also probably give Office away on the Web. But will that really help them? Office sales were reported to be 40% of revenue for Microsoft. The most ironic turn of events would be Microsoft Office use over the Web, powered by Sun Unix or Penguin Computing Inc.'s Linux servers. Of course, Microsoft could use some servers running NT; they would just need 10 as many of them, since NT is not scalable. Either way, this development would eat into the sales of Microsoft Office and perhaps not boost sales of NT servers.

Sun has a good idea. Many people are ready to get off the merry-go-round of constant, expensive Microsoft Office upgrades. As for new purchasers, the prices keep improving. StarOffice runs on more operating systems than Microsoft Office does. Microsoft's only long-way to stop Sun's eating some of its lunch will be to buy Sun.

A.K. Siewers
Santa Cruz, Calif.

LOWDOWN ON CHEAP CHATS

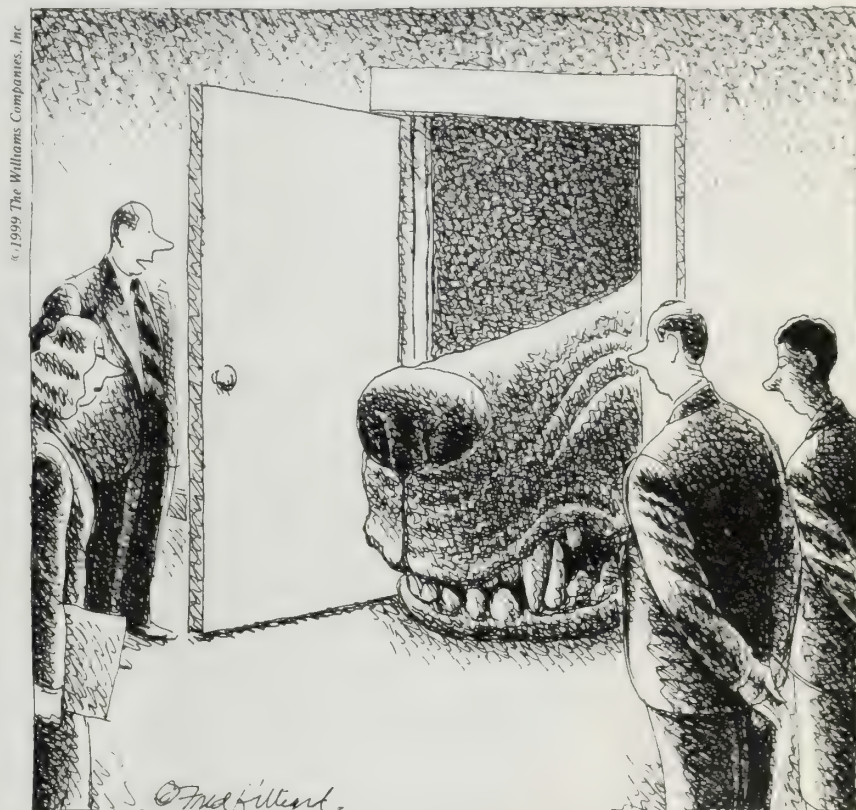
Regarding "Why talk is so cheap" says Analysis & Commentary, Sept. 13. The basic reason for the declining cost of long-distance communications is the advent of the communications satellite. Previously, the cost of providing service over land was directly related to separation distance: The greater the distance, the more microwave relay stations were required. Today, thanks to communication satellites in

geosynchronous orbit, the cost of linking two parties separated by 2,500 miles is the same as the cost of linking two parties separated by 250 miles. Communication satellites also are responsible for declining trans-oceanic rates, because they provide same-cost linkage over water as well as over land.

Philip J. Klass
Washington

SHOULD WE TAX THE DEAD— AND HOW MUCH?

I was disappointed with Gary S. Becker's joining the estate-tax repeal chorus ("Estate taxes: an idea whose time has gone," Economic Viewpoint, Sept. 13). I could find in his column no reason to repeal the tax other than to save taxpayers the money they spend to try to avoid it.



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CORRECTIONS & CLARIFICATIONS

In "Emerging Markets: Tread Carefully" (Global Investing, Sept. 13), the name of Sappi Ltd., a South African wood-products and paper manufacturer, was misspelled. Based on inaccurate data provided to Bloomberg Financial Markets by Nelson Information, we published an incorrect price-earnings ratio for another South African concern, Palabora Mining Co. Its current p-e ratio is 5.3.

Too bad he did not explain to us nonlaureates whether any benefits result from leveling the playing field by taxing away the meritless process which he casually describes as the "greater abilities of successful parents" being transmitted to their children. Could some entrepreneur's \$1 billion in "abilities" be better taxed at death and used for public education and such, as he suggests, instead of just sprinkling it on the decedent's kiddies (whose only proven skill is often one described as being clever at selecting their parents)?

Richard Frome
New York

If social engineering is a legitimate use of the tax code, as he states, then Gary Becker is wrong when he writes that the time has come to abolish the estate tax. Family wealth plays a much too prominent role in relationships between the generations. Society would be far better off if family members related in a more honest and caring manner than that dictated by greed and promise of future reward.

We cannot legitimately interfere in games played by living members of families. But this does not mean we ought to encourage people to focus on how they can exert power after they die.

Also, imagine what a better place this would be if all of the productive resources of earth were being completely recycled once every generation.

Darrell Prows
Salt Lake City

Why not eliminate estate taxes as well as those on capital gains, interest, and other taxes on income from wealth and substitute a general tax on net worth? By and large, wealth, as opposed to income, is untaxed. It seems likely that there is a total of nearly \$40 trillion in the U.S., with a third owned by the top 1% and twice that by the upper 10%. A progressive rate averaging 2% would yield roughly \$800 billion,

enough to offset eliminating these taxes as well as the punitively regressive payroll tax that supports Social Security.

Since the net worth now in equity markets is well over \$10 trillion and has been yielding nearly 20% recently, a 2% tax seems much less than onerous. Decisions to buy or sell property would hinge mainly on their value in increasing wealth and not on complicated tax consequences. Why has no politician suggested similar reform as a proper subject for debate? Only Bill Bradley has suggested eliminating the payroll tax, and he hasn't said much about it lately.

F. Morehead
Southbury, Conn.

WHY CAPITAL CAN'T SIT STILL

Few whose money is professionally managed care much about the businesses in which their manager invests. All they want is steady returns, often at unsustainable rates ("When capital gets antsy," Management, Sept. 13).

The price of even the best-managed companies seldom goes straight up. Money managers can't sit tight and exceed clients' often unreasonable expectations. So they sell and buy what analysts say is "poised to move sharply higher."

CEOs only have themselves to blame. Make those who exercise stock options hold the share for one or two years before selling. Quit supporting the stock price by buying back shares at prices at which new stock ought to be sold, and pay a decent cash dividend to those willing to hold the shares.

William N. Briegel
Redford, Mich.

WHO PAYS FOR THE RIGHT TO SUE AN HMO?

"HMOs are beginning to look vulnerable" (News: Analysis & Commentary, Sept. 13) implied that if the right-to-sue bills are passed, HMOs would lose and consumers would win. In reality, HMOs are financial disbursement intermediaries for Corporate America and its employees. If one of these bills passes, HMOs will simply raise rates to employers by about \$250 per year per employee (including family).

In turn, employers will pay their employees \$250 less than they would have. The real losers will be the 99.9% of consumers (employees) who have no interest or need to sue but who will be financing this new "right" whether they want to or not. An alternative is to give employers and employees the option to

buy a special policy with the "right" to sue. In this way, those who wish to chase this "right" can do so without burdening those working people who do not wish to spend \$250 for a "right" that may not mean as much to them.

Kenneth S. Abramson
Sanford C. Bernstein &
New York

A SHAREHOLDER EYES BARBIE'S BOTTOM LINE

As a longtime, albeit relatively small, Mattel Inc. shareholder (225 shares), I was once a big fan of Jill E. Barad's. She has lost patience as she continues to blame Mattel's problems on everyone else rather than accepting responsibility as CEO ("Searching for turnaround Barbie," The Corporation, Sept. 6). I am also tired of hearing her excuse that, as a woman, she is attacked by the media and faces gender discrimination. So, Ms. Barad—I don't care if the company's head is male or female, I just want Mattel's stock price back above \$40.

Richard V. McCarty
Los Angeles

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A photograph of a sailboat on a calm sea at sunset or sunrise. The sky is a mix of purple, pink, and blue. The sailboat is on the left side of the frame, with its mast and sails visible. The word "Pressure." is written in a serif font in the sky to the right of the boat.

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BY STEPHEN H. WILDSTROM

WEB PHONES: NOW YOU'RE TALKING

The latest batch are especially useful as laptop modems. But a few glitches persist

The cellular data drought, which has left Americans way behind the rest of the world in their ability to use mobile phones as versatile communications devices, may be coming to an end. On Sept. 20, Sprint PCS Group (www.sprintpcs.com) dramatically expanded the availability of mobile communications in the U.S. by offering data capability on its national network.

The new services consist of two pieces. The one that will get the most attention—and certainly the most advertising hype from Sprint PCS—is the ability to browse the Internet and send and receive e-mail directly from a new breed of so-called Web phones. But the part that I think most mobile professionals will find far more useful is the ability to use a PCS phone as a wireless modem for laptops. Pricing ranges from a \$9.95 monthly add-on to existing Sprint accounts to a \$180 plan that gives 1,200 monthly minutes of voice or data airtime.

BUYING OPTIONS. Many new wireless phones, ranging from the \$400 multifunction NeoPoint 1000 to the \$100 Qualcomm QCP-1960 Thin Phone, can be used as modems. You just connect the phone to a serial port on your laptop (in-

frared and universal serial bus options would be welcome improvements) and run the free Sprint software that lets Windows recognize your phone as a modem and creates “wireless” copies of any dial-up networking connections. Once it's done, you can get to your Internet service provider just as if you were connected to a phone line. The nominal speed is 14,400 bits per second, though the effective speed can drop below that if you have a

areas, service is scarce, and even within them there are frustrating dead spots. For example, I got an excellent signal inside the terminal at Detroit Wayne County Metropolitan Airport but none at the Hertz lot.

To test the new Web browsing and messaging services, I used a phone from NeoPoint (www.neopoint.com). The NeoPoint 1000, a slender 5½-inches-long, 6.4-ounce phone features a mini-browser, e-mail program, and an address book, calendar, and to-do list. The 11-line, 24-character liquid-crystal display works well only on sites that have been specially formatted for limited displays. The available sites are the usual mix of head-

keypad. NeoPoint uses technology called T9 from Tegic Communications to make guesses, mostly successful, whether you want, say, an, or o when you push helps, but not enough.

The limitations of the phone package also hinder organizer functions. The phone syncs to a variety of desktop contact managers using Tegic Technology's IntelliSyncware. But it ought to let you when you're about to overwhelm the phone's memory, not just dump data, it runs out of room. My contact list only made it to Ms. Navigation of contacts

calendar, and the list is also a word compared to a device like a Palm handheld.

Although phone-based organizers are improving, the limitations of displaying data entry in a small enough to make an acceptable phone may discourage the use of all-in-one devices. I would prefer to use a Palm V or a Windows device—or any other handheld—to enter and display data and have the phone tucked away in my pocket or briefcase as a wireless modem. This sounds like a Buck Rogers fantasy, but the short-range radio communications technology known as Blue Tooth is under active development and could

KNOW-IT-ALL:
Phones browse the Web and handle e-mail



Cellular Data Services

TECHNOLOGY AND TYPICAL CARRIER	DATA SERVICE
ANALOG CellularOne	19.2 kilobits per second (requires special modem)
DIGITAL CELLULAR Bell Atlantic Mobile	Short message service*
PCS CDMA Sprint PCS	14.4 kb/s, Web browsing, e-mail, short messages
PCS TDMA AT&T Wireless	Short messages*
GSM Voicestream , Pactel Wireless	9.6 kb/s, short messages
IDEN Nextel	Short messages

*Some phones may be equipped for Web browsing and e-mail using separate cellular digital packet data service.

DATA: COMPANY REPORTS

weak signal. Web browsing at that speed is painful, but it's fine for e-mail.

The main thing that keeps this system from being as good as the wireless data service in Europe (BW—Aug. 9) is spotty network coverage. Sprint's urban service is generally good, though there is none, for example, in Princeton, N.J., Augusta, Me., or Albuquerque. Outside urban

lines from ABC and Yahoo!, forecasts from the Weather Channel, stock quotes, and flight information from TheTrip.com. The Phone.com browser lets you visit any Web site, but most pages are unreadable.

There are actually two e-mail services: the pager-like PCS short message service and Internet mail. Both are hampered by the difficulty of entering data using a phone

show up in cell phones and other consumer products the end of next year.

My experiments with wireless data communications have convinced me that the technology can really make life easier for mobile professionals. The bad news is that the U.S. still lags behind the rest of the world, the upside is that the situation is improving and the new devices and services hitting the market will help close the gap.

QUESTIONS? COMMENTS? E-mail tech&you@businessweek.com or fax (202) 383-2125

TRUST

Private and Powerful Family Behind *The New York Times*

Susan E. Tift and Alex S. Jones
Brown • 870pp • \$29.95

THE ARTHURIAN LEGENDS: TALE OF *THE TIMES*

The front page of *The New York Times* proclaims that it offers "All the news that's fit to print." The Sulzberger family, who control the *Times*, have been guarded about their own affairs. That, and its position as the world's most influential newspaper, has spawned a mini-industry of books. They include memoirs by Arthur Hays Sulzberger (1971) and John Corry (1993); works by former staffer Gay Talese (1969) and outsider Edwin Diamond (1993); and a commissioned history by Meyer Berger (1951).

At *The Trust: The Private and Powerful Family Behind The New York Times* should stand as the definitive story of the *Times* for years to come. Susan Tift, a former associate editor at the *Times*, and former *Times* reporter Alex S. Jones have produced a remarkable chronicle—a sprawling panorama spanning five generations. It encompasses countless struggles, broken marriages, embarrassing infidelities, and other assorted family laundry. It also tells a story of power and endurance. At 870 pages, seven years in the making, *The Trust* is both austere and, at times, exhausting.

Tift and her husband Jones approached Arthur Ochs "Punch" Sulzberger, then chairman and CEO of New York Times Co., in 1992. At first he declined but eventually relented and let it be known that he would cooperate. Virtually all family members of the *Times* Co. employees followed his example.

Most of the authors of other *Times* books had liberal access to *Times* people and other family materials. But Tift and Jones's entrée certainly surpassed that of other books on the subject. The pair mined voluminous letters, memoranda, boardroom minutes, and other private materials. They conducted some 550 interviews. "We got an unobstructed view," Jones says. As with the Talese

and Diamond books, the Sulzberger family was not given an advance review of the manuscript.

For what seems close to an authorized project, *The Trust* often portrays the players in embarrassing and revealing circumstances. On one day in 1996, Lance Primis, president of The Times Co., was preparing to meet with Punch, expecting to be named CEO. "It's all coming together," he told a colleague. But he had drastically misjudged his situation. At the meeting, Punch fired Primis. "It's like being at your own wake, awake," he said later. The book relates longtime Executive Editor Abe Rosenthal's "crazy period," as it was called internally. Punch was pushing Abe to retire, but Abe resisted, sometimes "burst[ing] into tears for no apparent reason." Said Punch: "He didn't have a nervous breakdown, but he was close to it. He would get so distraught that he couldn't operate well. It was a hell of a problem."

Although Punch eventually emerged as a strong and effective executive, early on he was derided by the family and others, often described as "hapless" and, says the book, in "hopelessly over his head." He was also capable of vindictiveness. As this book reveals, after I wrote a 1972 story about *The Times* in *New York* magazine that Punch regarded as "a real hatchet job," I was blacklisted from writing for the paper.

In some ways, *The Trust* reads like a lurid potboiler. Sample: "Arthur's vision of his daughter as unattractive and Iphigene's distaste for sex blinded them to the sincere and crackling electric passion Ruth [Sulzberger] and Ben [Hale Goldens] shared."

The authors, though, clearly intend

The Trust to be much more than an assemblage of spicy anecdotes. They are aiming for history, in the league of Ron Chernow's *Titan: The Life of John D. Rockefeller, Sr.* and Jean Strouse's *Morgan: American Financier*. The family story is certainly worthy of that weight. The Sulzbergers are more than a family—they're a monarchy. The official family tree, appropriately, includes five Arthurs. The book accurately terms the family "arguably the most powerful blood-related dynasty in twentieth-century America."

It started with Julius Ochs, born in 1826 in Bavaria. In 1896, one of his sons, Adolph, bought the then struggling paper, *The New York Times*. Adolph's only daughter Iphigene, who reigned as family matriarch and "moral authority" until her death in 1990 at the age of 98, married Arthur Hays Sulzberger in 1917. He then joined *The Times*, eventually becoming publisher and chairman. The Sulzbergers have dominated the family

ever since. As Arthur Hays Sulzberger's only son, Punch took control. Punch's only son Arthur Ochs Sulzberger Jr., 48, became publisher in 1992 and chairman in 1997.

The *Times* Co. is one of the most unusual major business establishments in the country, a murky potpourri of family loyalties, messianic missions, divine rights, shareholder responsibilities, and business traditions, roughly in that order. That mix,

though, has produced an abiding passion for high-quality newspaper journalism at a time when the newspaper industry is cutting budgets, dumbing down news, and all but obliterating the wall between editorial and advertising. Among the big metropolitan dailies, few besides *The Times* and *The Washington Post*, also family-owned, have steadfastly resisted the trend.

One reason: a trust set up by the family when Adolf died in 1935. It controlled *Times* Co. stock until Iphigene died. But in 1986, the Sulzberger family unanimously signed an extraordinary pact enabling the family to control *The Times* for another century or so. In doing so, the family could forfeit potential capital gains of billions of dollars.

But there is a dark side to *The*

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Books

Times. Until very recently, the company was rife with nepotism. Numerous family members, many only marginally qualified, were given senior positions. An astonishing number of family members have suffered learning disabilities, nervous breakdowns, depression, and other ills. "[Depression] is in the family," the gene once said. Yet by some alchemy the family achieved, say the authors, a position of influence they could not have achieved as individuals."

The Trust's authors masterfully weave the myriad plots, subplots, and digressions into a coherent narrative. They display an acute observational personality and motivation.

But the book lacks some of the gripping narrative sweep achieved by Talese's epic *The Kingdom and the Power*. This is unfortunate because *The Trust* doesn't generate much suspense. The authors' last book, *The Patriarch: The Rise and Fall of the Bingham Dynasty*, teemed with drama as it described a family that destroyed itself. But the Sulzbergers, for their faith have hung together. Once they gained power, the Arthurian successions, in degree, had a sense of inevitability.

To deal with the problem, Tiff Jones structures much of the book as an extensive set of horse races. End pages are spent handicapping countless candidates for various positions, an apparent effort to pump up the action.

Today, *The Times* is flourishing, as with most of the major newspapers. Its story now holds plenty of suspense. The authors' depiction of Arthur's capabilities seems somewhat misleading. Earlier, one associate said Arthur needed to "go back in the oven and bake a little longer." But he could not grow, as his father did. What's more, Arthur Jr. and the newspaper face ongoing problems: The Internet could undermine all news organizations. Advertising pressures will intensify. Control and family harmony may not suffice to preserve the "trust." The book quotes one editor: "Deep in Arthur's soul, he believes that if he blows this will burn in hell."

A lot is at stake. At the end of *Trust*, Tiff and Jones aptly quote Talese's abiding 30-year-old hope: "Where can people [go] who have values and a sense of right and wrong, of standards... I think today, the Sulzberg family and *The New York Times* [are] our only hope."

BY CHRIS WELLES

Senior Editor Welles has been lowering the media for 35 years.

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THE BUSINESS WEEK BEST-SELLER LIST

HARDCOVER BUSINESS BOOKS

- 1 **WHO MOVED MY CHEESE?** by Spencer Johnson, M.D. (Putnam • \$19.95) *Learning to accept change.*
- 2 **THE NUDIST ON THE LATE SHIFT** by Po Bronson (Random House • \$25) *Silicon Valley's curious ways.*
- 3 **THE 9 STEPS TO FINANCIAL FREEDOM** by Suze Orman (Crown • \$23) *Practical and "spiritual" steps for managing money.*
- 4 **BUSINESS @ THE SPEED OF THOUGHT** by Bill Gates with Collins Hemingway (Warner • \$30) *A detailed guide to the fast-emerging e-business age.*
- 5 **THE COURAGE TO BE RICH** by Suze Orman (Riverhead • \$24.95) *The rites of passage—and their financial consequences.*
- 6 **THE SILICON BOYS** by David A. Kaplan (Morrow • \$27) *The superrich are different from you and me.*
- 7 **THE 21 INDISPENSABLE QUALITIES OF A LEADER** by John C. Maxwell (Thomas Nelson • \$14.99) *Transforming yourself "from the inside out."*
- 8 **FIRST, BREAK ALL THE RULES** by Marcus Buckingham and Curt Coffman (Simon & Schuster • \$25) *A Gallup investigation into managerial success.*
- 9 **THE ROARING 2000s** by Harry S. Dent Jr. (Simon & Schuster • \$25) *Why the good times won't go away.*
- 10 **WHY WE BUY** by Paco Underhill (Simon & Schuster • \$25) *An anthropologist offers a "science of shopping."*
- 11 **THE LEXUS AND THE OLIVE TREE** by Thomas L. Friedman (Farrar, Straus & Giroux • \$27.50) *How globalization is transforming the world, by The New York Times's foreign-affairs columnist.*
- 12 **PERMISSION MARKETING** by Seth Godin (Simon & Schuster • \$24) *Give customers an incentive to hear your message, says a Yahoo! executive.*
- 13 **THE 21 IRREFUTABLE LAWS OF LEADERSHIP** by John C. Maxwell (Thomas Nelson • \$17.99) *A minister's codification.*
- 14 **HIDE YOUR ASSETS AND DISAPPEAR** by Edmund J. Pankau (HarperCollins • \$22) *Get lost—and shake your creditors, says a private eye.*
- 15 **SELLING THE INVISIBLE** by Harry Beckwith (Warner • \$17) *A collection of bite-size lessons on marketing.*

PAPERBACK BUSINESS BOOKS

- 1 **THE MILLIONAIRE NEXT DOOR** by Thomas J. Stanley, Ph.D. and William D. Danko, Ph.D. (Pocket Books • \$14) *The story of the ways of the wealthy among us.*
- 2 **THE SEVEN HABITS OF HIGHLY EFFECTIVE PEOPLE** by Stephen R. Covey (Fireside • \$14) *Habitually popular.*
- 3 **RICH DAD, POOR DAD** by Robert T. Kiyosaki with Sharon Lechter, C.P.A. (TechPress • \$15.95) *Teaching your kids the rules of money that the rich play by.*
- 4 **THE WALL STREET JOURNAL GUIDE TO UNDERSTANDING MONEY AND INVESTING** by Kenneth M. Morris and Alan Siegel (Fireside • \$15.95) *Concise explanations enriched with graphics.*
- 5 **THE MOTLEY FOOL INVESTMENT GUIDE** by David and Tom Gardner (Fireside • \$13) *The online duo puts it on paper.*
- 6 **THE ONE MINUTE MANAGER** by Kenneth Blanchard, Ph.D. and Spencer Johnson, M.D. (Berkley • \$12.95) *Three management techniques, conveyed in brief story form.*
- 7 **BARRON'S DICTIONARY OF FINANCE AND INVESTMENT TERMS** by John Downes and Jordan Elliot Goodman (Barron's • \$13.95) *What is an oligopsony, anyway?*
- 8 **THE 1999 WHAT COLOR IS YOUR PARACHUTE?** by Richard Nelson Bolles (Ten Speed Press • \$16.95) *The enduring job-search bible.*
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BUSINESS WEEK's Best-Seller List is based on a survey of chain and independent booksellers that carry a broad selection of books on economic management, sales and marketing, small business, investing, personal finance, and careers. Well over 1,000 retail outlets nationwide are represented. Current rankings are based on a weighted analysis of unit sales in August.

Reviews and more are available on AOL (Keyword: BW) or www.businessweek.com

HOT TYPE

THE BOOKSTORES CALL IT "SELF-HELP." BUT the genre's avalanche of advice testifies to the large number of folks eager to lend you a hand.

Consider Nos. 7 and 13 on this month's hardback list: *The 21 Indispensable Qualities of a Leader* and *The 21 Irrefutable Laws of Leadership*. Author John C. Maxwell is a Christian minister who heads several nonprofit and for-profit leadership-training outfits. From his INJOY Web site, you can get newsletters, enroll in conferences and forums, and purchase audio tapes and more than 20 books.

But are Maxwell's maxims anything new? His 21 "laws" will seem familiar to aficionados of the genre. Leaders know how to communicate, for example, and they find a way to win.

Moreover, axioms are highlighted by anecdotes featuring many of the same coaches, military figures, and business executives that populate other such books.

Maxwell's somewhat overlapping "qualities" include character, communication, and vision. While some of his formulations are crafty ("charisma" gives instruction on how to make a good first impression), most encourage readers to develop desirable traits through self-examination.

If you need reminders that "trust is the foundation of leadership" or want character-building drills that teach you to "face the music," both books can be helpful. But please—don't get too inspired. America has enough self-help helpers already.

BY HARDY GRE

Rated The #1 Tasting Vodka In The World.

In 1998, the Beverage Testing Institute of Chicago conducted a blind taste test of more than 80 vodkas. They awarded points based on smoothness, nose, and most importantly, taste. Of all the vodkas, Grey Goose® Vodka emerged victorious, receiving 96 points out of a possible 100.

Founded in 1981, the Beverage Testing Institute conducts tests in a specially designed lab that minimizes external factors and maximizes panelists' concentration. The Institute selects judges based on their expertise, and its tasting and scoring procedures are widely praised as the best in the industry.

Rank	Vodka	Country
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2	Canadian Iceberg Vodka	Canada
3	Stolichnaya Gold Vodka	Russia
4	Staraya Moskva Premium	Russia
5	Van Hoo Vodka	Belgium
6	Stolichnaya Vodka	Russia
7	Tanqueray Sterling Vodka	England
8	Rain 1995 Harvest Vodka	USA
9	Ketel One Vodka	Holland
10	Wyborowa Vodka	Poland
11	Kremlyovskaya Vodka	Russia
12	Finlandia Vodka of Finland	Finland
13	Alps French Vodka	France
14	Skyy Vodka	USA
15	Original Polish Vodka	Poland
16	Smirnoff Vodka	USA
17	Polmoszarny Czysta Wódka	Poland
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e-commerce

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intel

BY JEFFREY E. GARTEN

WHAT GLOBAL CAPITALISM NEEDS NOW: LESS RED TAPE



MODEL:
The World Bank is trying mightily to look like a streamlined corporation. The IMF should follow its lead

One urgent problem facing the new global economy is the danger that world markets are moving too fast for governmental institutions to keep up. This should worry top economic officials who, on Sept. 28, are convening for critical meetings of the International Monetary Fund and the World Bank and, in November, for a ministerial session of the World Trade Organization. It should also be a concern for all global CEOs, whose operations are dependent on an open and stable world economy.

The IMF is trying to curb financial crises such as those that have engulfed Asia and Russia. The World Bank is helping countries confront escalating poverty and establish sound banking regulations and modern corporate governance. The WTO is overseeing a new global round of trade negotiations.

These are all worthy goals, but are these institutions organized to reach them? After all, major corporations are flattening their reporting structures to accelerate decision-making, incorporating the latest information technologies, and intensifying their partnering with one another. They are enhancing customer service and hiring and retaining the best people. But are international governmental organizations doing the same? Are they simply too slow and bureaucratic to be effective in today's super-charged global marketplace?

CLEANING HOUSE. For a clue to the possibilities and the obstacles, keep your eyes on James D. Wolfensohn, president of the World Bank. A former Wall Street luminary and onetime chairman of both Carnegie Hall and the John F. Kennedy Center for the Performing Arts, he took the reins at the World Bank in 1995. At the time, it was an organization that required five levels of decisions and 12 to 15 months to get projects approved. Making a loan took precedence over evaluating its impact. Partnerships with other organizations were rare. Knowledge and experience was poorly shared.

Wolfensohn asked for the resignation of his top 150 managers, made them reapply for their jobs, and sacked or reassigned 35% of them. He dismantled a highly centralized operation and forced executives to relocate closer to their clients around the world. He linked all of his offices via satellite and posted best practices for promoting economic development on publicly accessible Web sites. He

forged new partnerships between the World Bank and a variety of other organizations such as the Organization for Economic Cooperation & Development, the World Wildlife Fund, and BP Amoco PLC. He sent his tenants to executive programs at leading business schools.

But that still may not be enough. Even though the World Bank is miles ahead of IMF in reforming itself, it is too early to tell whether or not Wolfensohn can succeed. Sometimes seems as if there are two World Banks," says Gustav Ranis, a development economist who heads Yale University's Center for International & Area Studies. "Then there is the powerful vision from headquarters, then there are the lending officers whose behavior is very slow to change." Wolfensohn also has to contend with a board of governors comprised of representatives of governments who tend to reflect the stodgy bureaucracy from which they come.

LESSONS OF THE PAST. Building the public infrastructure for global capitalism may be the most important issue facing political and business leaders today. So a lot is riding on Wolfensohn's success and the precedents it sets. Today, the international economy affects everyone's daily lives as never before. Although every major multinational corporation, from Goldman, Sachs & Co. to Toyota Motor Corp., is gambling that markets will remain open and growing, their bets are no sure thing. After all, how stable would our international economy be without an effective Federal Reserve, Securities & Exchange Commission, Federal Deposit Insurance Corporation, Federal Trade Commission? Global institutions of similar caliber are increasingly necessary as well.

It is politically impractical to call for a new global economic architecture, but it is unrealistic to ask for a vastly improved set of institutions where effectiveness and public accountability are enhanced? The lesson from some of the great corporate turnarounds of the past decade—IBM, Motorola, Unisys, American Express—is that an organization needs to be on the brink of failure before dramatic restructuring can be successfully implemented. Facing mounting global pressures with outmoded structures, the major international economic institutions are quite there yet. But given the pace of global change, they soon could be.

Jeffrey E. Garten is dean of the Yale School of Management. A former investment banker, he was Under Secretary of Commerce for International Trade in the first Clinton Administration (jeffrey.garten@yale.edu).

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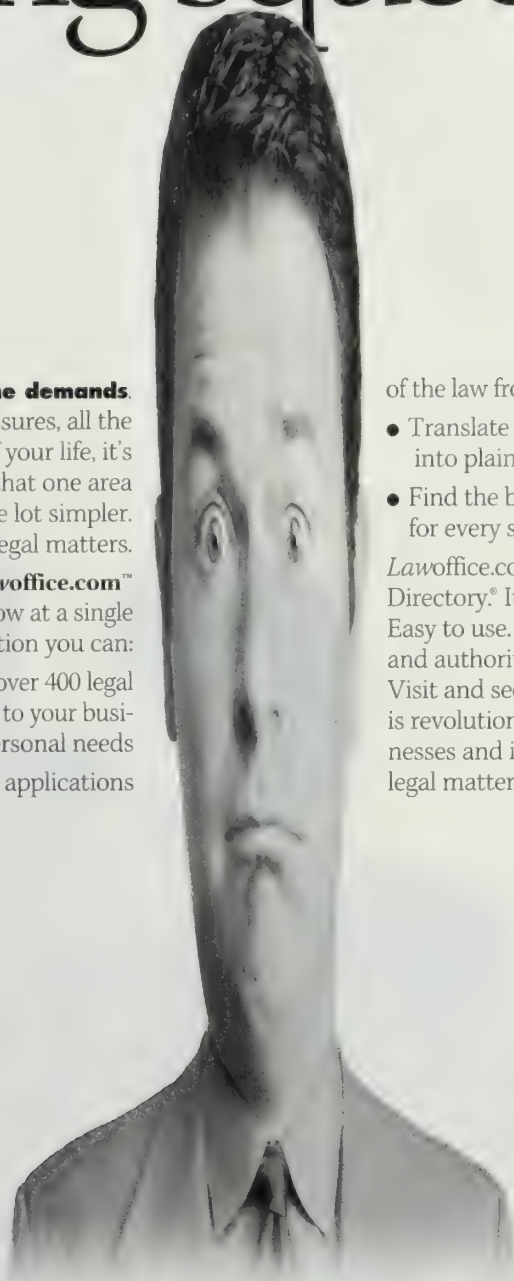
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BY GENE KORETZ

INFLATION'S NEW ADVERSARY

The Web is only starting to bite

With global growth picking up steam, you might think America's remarkable disinflationary performance at retail counters is finally headed for rough waters. Not necessarily, claim economists Ethan S. Harris and Joseph T. Abate of Lehman Brothers Inc. The advent of e-commerce, they say, is the latest stage in a continuing revolution in retailing that could keep a tight rein on prices for years to come.

The first stage of that revolution was begun earlier in the decade with the pro-

THE HEFTY DOWNWARD PULL OF INTERNET PRICES

ITEM	PERCENT PRICE DIFFERENCE FROM ORDINARY RETAIL OUTLETS*	
	WITH SHIPPING COSTS	WITHOUT SHIPPING COSTS
OVER-THE-COUNTER DRUGS	-6%	-10%
PRESCRIPTION DRUGS	-28	-28
APPAREL	-38	-38
ALCOHOL AND CIGARETTES	-28	-35
GROCERIES	0	-17
HOME ELECTRONICS	-4	-5
TOYS	+9	+4
HARDWARE	+2	-2
AVERAGE	-13	-14

*Based on mid-August survey. Ordinary U.S. retail outlets include discount stores.

DATA: LEHMAN BROTHERS

liferation of high-volume discount stores, heightened competition, and a growing "buy only on sale" mentality among consumers. Its impact was most apparent in the general merchandise, apparel, and furniture sector, where prices have been falling at an accelerated pace since 1994.

Now commerce on the Internet is adding a new layer of competition and squeezing per-unit profits further, while providing an even more cost-efficient mode of distribution. Although e-commerce likely accounted for less than 1% of total retail sales last year, Harris and Abate point out that nearly every item that can be purchased at a traditional retail store is available on the Web, and sales volume is doubling every year.

For cost-conscious consumers, the trend adds up to unparalleled leverage, as buyers can comparison-shop across

dozens of stores at the click of a mouse. For sellers, savings come via lower real estate and rental costs, and reduced outlays for advertising, inventory, and transportation—items that ordinarily account for some 38% of the consumer price of goods, according to one study.

So how much can consumers save currently? A Lehman Brothers survey recently compared e-commerce prices of over 100 retail items with those in moderately priced retail outlets in the New York area. On average, they found that goods cost about 13% less on the Net.

But that's only a hint of deflationary pressures to come, say Harris and Abate. They note that many traditional retailers initially sell on the Web with little or no discount, since they don't want to undercut their own stores. Eventually, however, competition forces them to pass on the savings.

Books are a case in point. Last year, only 3% of books were sold online (where they cost about 20% less than in shops), and book prices tracked by the Bureau of Labor Statistics were still rising. But this year, they are falling at a 4% annual rate—partly because the BLS has apparently started to sample online sellers, but mainly because Internet competition is affecting traditional sellers.

Looking ahead, the two economists think other products will also see prices drop as Net sales build. By 2002, they expect consumer inflation to be running about half a percentage point below what it would have been without the downward pull coming from e-commerce.

WHY EXPORTING NATIONS THRIVE

A study weighs cause and effect

Why have so many nations experienced faster economic growth after cutting trade barriers and boosting their export performance? One theory is that companies that become exporters tend to post enhanced productivity gains after entering global markets.

As it happens, the story is more complicated, report Andrew B. Bernard and J. Bradford Jensen in a recent National Bureau of Economic Research study of U.S. manufacturing industries from 1984 to 1992. While exporting plants are more productive than nonexporters in the same industries, the study finds that their stronger productivity usually surfaced in the years before they became exporters and posted little improvement in subsequent years.

On the other hand, exporters tend to grow far faster than nonexporters. And as these high-productivity plants account for more and more of an industry's output over time, they tend to boost its overall productivity. Indeed, Bernard and Jensen estimate that exporters accounted for as much as 65% of manufacturing productivity growth over the 1984-92 period, far more than their 46% share of factory employment.

PRODUCTIVITY'S BIG PRODUCER

U.S. EXPORTERS' SHARE OF MANUFACTURING



DO BROKERS' PICKS MATTER?

Yes, but less than you might think

If you're a stock market investor who relies on a broker for advice, it seems to make perfect sense to choose a brokerage whose recent recommendations have been winners. But would such a strategy pay off big in the long run?

Not according to Brad M. Barber, the University of California at Davis, and Reuven Lehavy and Brett M. Truman at the University of California, Berkeley. Analyzing the recommendations of some 100 brokerages from 1984 to 1996, they found that people who followed the top fifth of brokers recommended the top fifth of brokers with the best performance in the prior year would have averaged 4.3% a year more on their portfolios over the decade than those following the advice of the fifth with the poorest prior returns.

After adjusting for market risk, company size, book-to-market value, and other factors that research has shown to strongly affect long-term stock returns, however, they found no significant difference between the returns of the best and worst brokers. In other words, it was the weighting of various portfolios that generated higher returns, rather than any persistent unusual stock-picking abilities of specific brokerages.

The researchers add that this doesn't mean that brokerage advice isn't valuable. "Stocks that are favored by a consensus of brokerage firms," notes Truman, "still tend to do significantly better than stocks in general disfavor."

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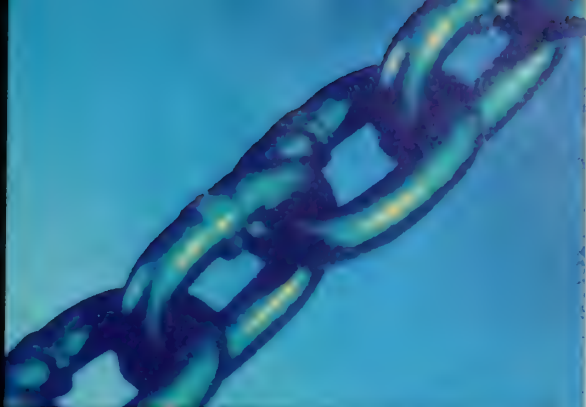
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5 year	28.14%	27.85%
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JAMES C. COOPER & KATHLEEN MADIGAN

SO MUCH FOR THAT SAFETY VALVE

s exports rev up manufacturing, pressures on interest rates will rise

U.S. ECONOMY

The global winds are shifting—and so is a key component in the economic outlook for the coming year. Shock waves from the 1997 collapse of Asian economies sideswiped world growth and depressed U.S. exports. Now, a global recovery is beginning to reverse all that. Europe is on track to grow 2% this year, with its expansion accelerating in 2000. Surprisingly positive data from Japan bolster the outlook for emerging Asia. And Latin America is set to bounce back from recession.

WHY THE TRADE GAP WILL NOT NARROW SOON



extremely tight labor markets. The danger: All this could heighten the pressure on the Federal Reserve to boost interest rates even further.

Based on the latest trade figures for July, inflation-adjusted exports of goods are up 14% from a year ago. Last year at this time, exports were in their steepest decline since the early 1980s. Moreover, the yearly pace of shipments to Pacific Rim countries, including Japan, has swung sharply, from -20% to 6%. The government does not adjust foreign-country data for inflation, but the inflation-adjusted pace is most likely greater, since export prices are still declining.

THE IMPROVING OUTLOOK FOR EXPORTS

will help slow the deterioration in the U.S. trade deficit, but any turnaround in the balance of payments is still a long way off (charts). That's because imports, fueled by eager and able U.S. buyers, are still growing far faster than exports. In fact, given that the value of imported goods and services is more than 30% greater than that of exports, exports would have to grow about a third faster than imports just to stop the trade deficit from widening further—let alone shrink it.

As a result, the U.S. is now in an unsustainable international financial position that will only get worse over the coming year. The broader current-account

deficit, which includes not only trade in goods and services but also payouts of other financial obligations, is headed to 4% of gross domestic product by the end of this year. At some point, when the financial markets deem this burden to be too high, changing investor sentiment will hurt the dollar, interest rates, and prices of U.S. financial assets. The dollar's recent weakness, especially vis-à-vis the yen, could be the first evidence of this adjustment.

The problem is that robust U.S. demand continues to suck in foreign goods. Consumer spending is on track to grow 4% in the third quarter. Housing starts rose again in August, by 0.4% to an annual rate of 1.68 million, as housing continues to defy the upturn in mortgage rates. And orders for capital goods are still in an uptrend, led by investment in high-tech equipment. Unless domestic demand slows, import growth won't ease up.

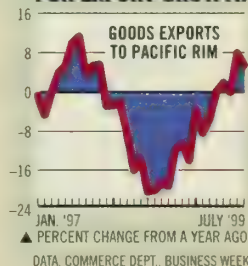
That lesson was made painfully clear in the July trade data. July exports of goods and services increased 0.5% from June, but imports rose 1%, causing the monthly gap to widen to a record \$25.2 billion, up from the previous record of \$24.6 billion in June. During the past 12 months, inflation-adjusted imports of goods have increased by 22%,

up from a 7% yearly pace this time last year. The speedup has been broad, but imports of advanced technology products and autos have led the way.

So far this year, the deficit is running 60% ahead of the gap for the same period last year. One reason it will remain huge is higher oil prices, as global recovery boosts demand. Oil is now close to \$25 per barrel, double its price at the end of 1998.

DESPITE THE POOR PROGNOSIS for the overall trade balance, manufacturing output is already picking up in response to the export recovery. Production in the factory sector increased 0.4% in August, on top of July's 0.6% advance. That was the strongest two-month increase in a year and a half, adjusted for the rebound from last year's auto strike. Considering that U.S. manufacturers now export about a quarter of their production, it's easy to see why output growth slowed to only 2% for all of last year from its 7% pace in 1997—and

A KEY SOURCE FOR EXPORT GROWTH



why factory production this year is accelerating.

Moreover, stronger foreign demand is increasing the need for businesses to hold more inventories. Just after the Asian crisis hit, stock levels mushroomed as foreign orders were canceled. In the first quarter of 1998, inventories expanded at an annual rate of \$91 billion, the most in any quarter in the postwar era. By this year's second quarter, quarterly inventory growth had shrunk to only \$12 billion, the slowest clip in 6½ years, as manufacturers adjusted to the export slowdown. Now, with inventories very lean relative to demand, stock building is set to add significantly to growth instead of subtracting from it.

BUT THERE IS A DOWNSIDE to the export-led manufacturing pickup. Because manufacturing is such a cyclically potent sector, overall growth is unlikely to slow much from its 4% pace of the past year. Some slackening will be necessary soon to avert further interest-rate hikes by the Federal Reserve. But the economy has never slowed when the pace of manufacturing activity is accelerating.

Last year, the export slowdown acted as a safety valve, taking pressure off U.S. production capacity. Rates of utilization fell from more than 82% in early 1998 to less than 80% in early 1999. That bit of slack, plus the worldwide collapse of commodity prices, helped keep pressure off goods prices in the U.S., despite the

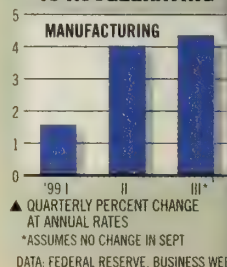
tightest overall labor markets in a generation. So productivity gains played a big part as well.

Now, manufacturing activity is being fueled by both renewed export growth and unrelenting strength in domestic demand from U.S. consumers and businesses (chart). Although utilization rates remain low, they are rising. The rate inched up to 79.8% in August from a recent low of 79.4% in June.

If factory output returns to its 1997 pace, capacity utilization will be back up to more than 82% within the year. At that level, supply bottlenecks that often fuel higher prices will develop. Meanwhile, the outlook for productivity growth will look iffy, as factories will need to beef up their payrolls again, after last year's layoffs.

In essence, the global recovery is slowly but surely restoring the set of conditions in the U.S. that had prevailed just when the Asian crisis knocked everything haywire. Back then, factory capacity use was high, labor markets were tight, inflation pressures were growing, and Fed policy was biased toward tightening. With manufacturing now revving up, the U.S. economy may prove to be a lot tougher for the Fed to tame than the markets now expect.

FACTORY OUTPUT IS ACCELERATING



SWITZERLAND

SURPRISING GROWTH AND NO INFLATION—FOR NOW

Strong gains in construction and exports are lifting the Swiss economy beyond expectations. The healthy boost has lowered unemployment but hasn't yet triggered a serious rise in inflation.

The real gross domestic product grew at an annual rate of 1.2% in the second quarter, following an upward revision in first-quarter growth from 0.4% to 0.9%. Both gains were larger than expected and put the Swiss economy on track to meet the government's 1999 growth forecast of between 1% and 1.5%, a projection once thought optimistic. Real GDP grew 2% in 1998, thanks to a spurt in the first half.

In the second quarter, a favor-

able exchange rate between the Swiss franc and the euro contributed to the 6% advance in exports—which account for almost half of the Swiss economy. Low interest rates, meanwhile, helped

construction expand at an annual rate of 5.9%. More important, the monthly data suggest the economy is barreling along in the third quarter as well. Retail sales rose in both June and July. And in August, the purchasing managers' index was up to a

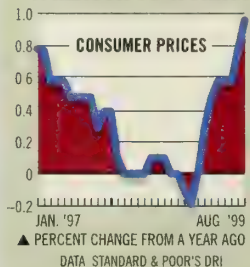
strong 55%, consumer confidence was the highest in nearly 10 years, and the jobless rate fell to 2.6%.

The growth surprise has raised speculation that the Swiss National Bank may hike interest rates

before any move by the European Central Bank. The policy rate now stands at 0.5%, the lowest in the world besides Japan. The SNB has stated that it could move before the ECB if inflation were to become a worry. While inflation is running above last year's pace (chart), this runup is mostly due to higher energy prices. Despite costlier fuel, total consumer prices in August were up just 0.9% from a year earlier while producer prices are still declining.

In addition, the talk of a rate rise, together with the GDP data, has lent some support to the Swiss franc, which had weakened against the euro and the dollar. A stronger franc could give the SNB some breathing room, holding down inflation through cheaper import prices and also slowing export growth.

SWISS INFLATION: A REASON TO WORRY?





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DaimlerChrysler's CEO is forcing out key U.S. execs—at what cost?

At least in the beginning, the guys from Daimler Benz and the guys from Chrysler Corp. got along like a bunch of fraternity brothers. Stoked with excitement about their historic merger and curious about each other's cars and cultures, they overcame differences of nationality and language. It was to be a marriage of equals. After marathon meetings in Switzerland on integrating the two companies, they even chugged beer together and clustered around a piano, bellowing German drinking songs.

But now, nearly a year later, the sounds emanating from DaimlerChrysler's German and U.S. headquarters are anything but harmonious. As Chairman Jürgen E. Schrempp prepares

to streamline his management, he's purging several senior executives whose strong performance—and outspoken manner—is a threat to his dominance, say sources familiar with the plan. The most shocking casualty of his overhaul is Thomas T. Stallkamp, president of the company's U.S. arm, who headed the integration efforts over the past year.

A key exec during Chrysler's turnaround from a second brush with bankruptcy in the early '90s, Stallkamp is revered as the auto maker's spiritual leader following the \$36 billion merger in November, 1998. He spent much of the early days answering thousands of e-mails from anxious Chrysler employees. That helped convince the troops it truly was a merger of equals, despite the announcement that their former boss, Co-Chairman Robert J. Eaton, would depart within three years.

SPINNING HEADS. Since then, morale has waned as employees have watched a parade of well-respected executives depart from Chrysler's Auburn Hills (Mich.) headquarters. Stallkamp's loss now would be painful, insiders say. "There are an awful lot of uneasy executives who probably will lose faith in

the company," says Dennis Pawley, who retired from DaimlerChrysler's management board in January. If Stallkamp leaves, says another ex-Chrysler official, "that place would completely unravel." In Germany, Daimler execs say the weeping is overblown.

Schrempp's restructuring also unsettles some large investors, who are doubting how well the merger is working. No wonder. On Sept. 15, CFO Manfred Gentz stunned analysts with news that unexpected costs could reduce the \$1.4 billion in expected savings from merger synergies. Yet hours before Schrempp and Eaton had issued a more upbeat line on the company's prospects, raising the 1999 sales forecast to \$155 billion from \$148 billion. "Our heads are spinning," says one bewildered analyst.

Schrempp and Eaton insist the merger is still on track. Nevertheless, the company is under stress. DaimlerChrysler is getting squeezed by losses in its European smart car division, by heavy incentives on its U.S. models, and by a weak euro. Its stock has been pummeled. After reaching a high of 10 in the early weeks after the merger,

The most shocking casualty: Thomas Stallkamp, DaimlerChrysler's U.S. president

mlerChrysler shares are now trading around 70.

What has investors worried is the very evidence of efficiency improvements. Daimler and Chrysler continue to operate essentially as two companies, despite a steady stream of managers crossing the Atlantic. One of the best opportunities for savings—combined purchasing—is getting bogged down because the companies have different specs for such materials as steel and vastly different ways of dealing with their suppliers.

Schrempp, eager to prove that DaimlerChrysler is a model for other mergers, wants to kick the integration into high gear. To do

group of outside directors and employee representatives who oversee the management board. Says one big U.S.-based auto investor: "If you wanted to look at it from the bullish spin, you might say that Schrempp will get everyone playing his way. He is creating his own team." But the investor favors a darker scenario: "He just wants his loyalists there,

Francois Castaing

Chrysler's former engineering guru; now a private consultant

James P. Holden

Top sales and marketing executive; will stay on DaimlerChrysler's management board with responsibility for all Chrysler brands

Thomas C. Gale

Chrysler's top designer; retains DaimlerChrysler management board seat for product strategy, but is expected to retire soon

Last August, after a disastrous press conference in New York in which DaimlerChrysler execs announced disappointing first-half profits, Stallkamp met with analysts over dinner and blamed the Germans for mishandling the news, according to one analyst. In no time, his remarks made it back to Germany.

Pawley, who served on the management board with both Stallkamp and

Lauk, agrees that the pair are "very opinionated, outspoken-type people who would not do what's politically correct." Still, he says, Schrempp

wouldn't push them off for their assertiveness alone.

Thomas T. Stallkamp

President of DaimlerChrysler's U.S. arm; expected to leave the company in management shakeup

But, he plans to reduce the unwieldy management board from 17 members to 10. Besides Stallkamp, others expected to leave the board include Kurt J. Lauk, a respected German head of commercial truck operations who returned that division to profitability in 1997; Theodor R. Cunningham, a former Chrysler executive who now runs DaimlerChrysler's Latin American operations, and Werner Tropiczsch, head of human resources in Stuttgart. The resulting board will have eight Germans and five Americans.

LOYALISTS? Schrempp's plan is to create three vehicle divisions and place a marketing executive in charge of each. James Holden, an up-and-comer at the former Chrysler, will continue to have responsibility for all Chrysler brands, including Dodge, Plymouth, and Jeep. Jürgen Hubbert will retain his post as head of the Mercedes-Benz division, and Peter Zetsche, Daimler's top sales and marketing executive, who is now Schrempp's heir apparent, will move over to the commercial truck division. The management changes were expected to be announced on Sept. 24, after a special meeting in Frankfurt of DaimlerChrysler's supervisory board, a



A BRIEF JOY RIDE

Only a third of the top executives who celebrated Chrysler's comeback in 1996 remain at the merged company

Robert J. Eaton

Chrysler CEO who became co-chairman of DaimlerChrysler at the time of the merger but made clear his intention to retire within three years

Dennis J. Pawley

Chrysler's head of manufacturing; retired from DaimlerChrysler shortly after the merger. Now a private consultant

Whatever the personal relations, the growing dominance of Daimler leaves Stallkamp with little reason to stay. "After a year under the Stuttgart yoke, he has figured out that he doesn't really have a future there," says an industry source. And even Eaton, who has tried to remain involved, has been invisible in the recent overhaul. "There's only one leader, and that's Jürgen Schrempp," says Pawley.

regardless of their track record."

Since he became CEO of Daimler-Benz in 1995, Schrempp hasn't hesitated to oust dissidents. In 1997 he pressured Helmut Werner, head of Mercedes-Benz, to resign despite his success at boosting the unit's sales and profits and expanding the product line. Then, Schrempp wanted direct control of the unit. A source close to him says the current situation is different: "It's not a power struggle."

Stallkamp did, however, have several well-known disagreements with Schrempp. He opposed a plan for a second megamerger with Nissan Motor Co. and resisted Schrempp's call for faster integration.

Could the merger unravel? "It's going to get a little bumpy for a while, but I don't view that as an indictment of the rationale for the merger," says Merrill Lynch & Co. analyst John Casasa. Still, with management in turmoil and margins under pressure, DaimlerChrysler is not living up to its promise. Schrempp, navigating solo, will be the one responsible for any wrong turns now.

By Joann Muller, with Kathleen Kerwin in Detroit, and Jack Ewing in Frankfurt

MERCEDES' SMART CAR



"spiritual leader" of the American team

WILL THE IMF GET A DOSE OF ITS OWN MEDICINE?

Major changes loom for the Fund, as the private sector provides the cash and helps solve crises

This year and next, Brazil will get new commitments for an estimated \$52 billion in foreign cash, and not one cent of it will come from the International Monetary Fund or any other official lender. The money will flow entirely from global capital markets and private investors, just as did the subscriptions to a \$3 billion Eurobond that Brazil floated in April. Goldman, Sachs & Co. and General Electric Capital Services Inc. are working together to restructure \$7 billion in Thai consumer and corporate loans. And in South Korea, U.S. venture capitalists Hambrecht & Quist led a group that took over Ssangyong Securities.

Welcome to the new global monetary system, in which the markets rule and bodies like the IMF take a backseat. Reform of the system looms large on the agenda of the IMF/World Bank annual meetings in Washington from Sept. 25 to 28. But while academics, policymakers, and bankers shower each other with a confetti of banking buzzwords and economic jargon, the world has moved on. In the past decade, private investors and lenders have sent a total of \$1.2 trillion to major emerging economies, six times the \$200 billion that came from all official sources. Meanwhile, new rules proposed by the Basel Committee on Banking Supervision, set up by global central bankers, could encourage banks to lend more money to countries such as Croatia, Malaysia, and Tunisia that have good credit ratings.

The surging conviction that the private sector can play a decisive role in resolving global financial crises is still surprising, considering the traumas of

the last two years. During the turbulent months of the Asian crisis, it seemed that only the IMF's billions could save the world from panic. But now analysts and policymakers see that the private sector proved remarkably adept at seeking out opportunities to restructure banks and other institutions caught in the crisis. Forward-looking leaders in places like Korea and Thailand have let the process work and invited in private players to aid in reform.

Thus, out of the Asian crisis is emerging a possible new blueprint for the global financial order. In it, the IMF has a reduced, but still critical role: using its limited funds as seed money to attract private money. The fund would work much more closely with private capital in bolstering financial institutions caught in a squeeze, providing hands-on crisis management, and transferring ownership of key assets to new players. In short, the august order imposed by Bretton Woods could give way to a more flexible model where many actors would have important roles.

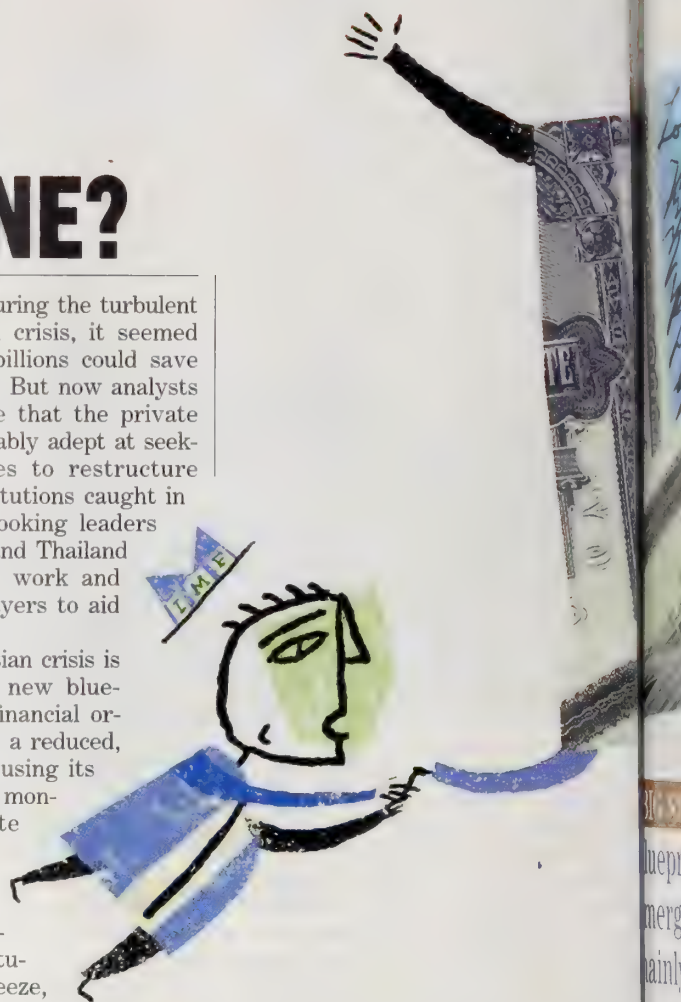
EROSION. Yet, much of this optimistic scenario will remain a dead letter unless the Clinton Administration can get Congress to back it. The math is simple. With an 18% share of the votes, the U.S. has a veto on IMF decisions. "The IMF is used as an arm of U.S. foreign policy," says Christopher Frenze, chief economist at the congressional Joint Economic Committee. "The problem is, there's been an erosion of support for the IMF from Congress in both parties."

The world can ill afford to delay change until Washington political battles are fought out. As the global economy recovers from the Asian crisis, demand for investment financing and borrowing is

set to soar. Already, about a third of the world's 150 developing nations have access to global financial markets and rely primarily on private finance.

Because of that reliance, the IMF's traditional solutions are often inadequate and sometimes dangerous. Today's crises are increasingly sparked when companies and banks become insolvent—rather than by slack government fiscal policies. That's what happened in Thailand in 1997. In such circumstances, IMF programs requiring countries to cut budget deficits, slash subsidies, and hike interest rates don't work. "The IMF found itself involved in issues that it didn't have the capacity, tools, or legitimacy to solve," says Walter Molano, an economist with BCP Inc. in Greenwich, Conn.

Still, the Fund is hostage to past successes, such as the bailout that followed the 1994 Mexican devaluation. That success, says Molano, led to a perception





investors need to participate in crisis management from the get-go, not just as an afterthought. That way, private banks and bondholders could no longer rely so much on being bailed out at taxpayers' expense.

But the private banks may have to be dragged kicking and screaming into these new arrangements. To them, it looks as though they're being set up to take what they call haircuts, in which banks write off a substantial part of what they're owed and even put in new money. Just such a painful trim is in view with Ecuador, which is near to defaulting on \$6 billion of bonds.

BACKSLIDING BANKS. All the same, major creditor countries are starting to put in place changes to make the system run smoother and help the flow of private funds. For example, as of April, the Fund instituted so-called contingent credit lines.

The idea is to provide financing for up to a year to countries that have sound economic funda-

mentals but are faced with a sudden loss of confidence in the markets. Debtor nations need to help themselves, too. Mexico, for example, holds regular conference calls for fund managers and institutional investors and publishes quarterly statistics. Mexico now has a better debt rating. "This [approach] introduces transparency and imposes discipline," says Lex Rieffel of the Institute for International Finance.

Private-sector solutions can work even once a crisis hits. Many specialist investors will buy assets at knockdown prices in the hope of turning a profit by making them over. Thailand, for example, agreed with the IMF to sell 56 insolvent finance companies in just 18 months. Now, Goldman is restructuring about \$2 billion of nonperforming loans at Thai Farmers Bank.

Cases of backsliding, such as the slowness of South Korean banks to deal with bad loans, show that there's more work ahead. "The pace of IMF reform cannot slow," warns Catherine L. Mann, senior fellow at the Institute for International Economics. "If it does, there'll be hell to pay." That's for sure. Somewhere on the planet, the seeds of the next financial crisis are already being sown.

By Laura Cohn in Washington and David Fairclamb in Frankfurt, with bureau reports

IG SHIFT: Out of the Asian meltdown, a new blueprint for the world financial order is emerging: The IMF would use its limited funds mainly as seed money to attract private capital

But the IMF was a "global fire brigade" capable of dealing with any problem, anywhere, anytime.

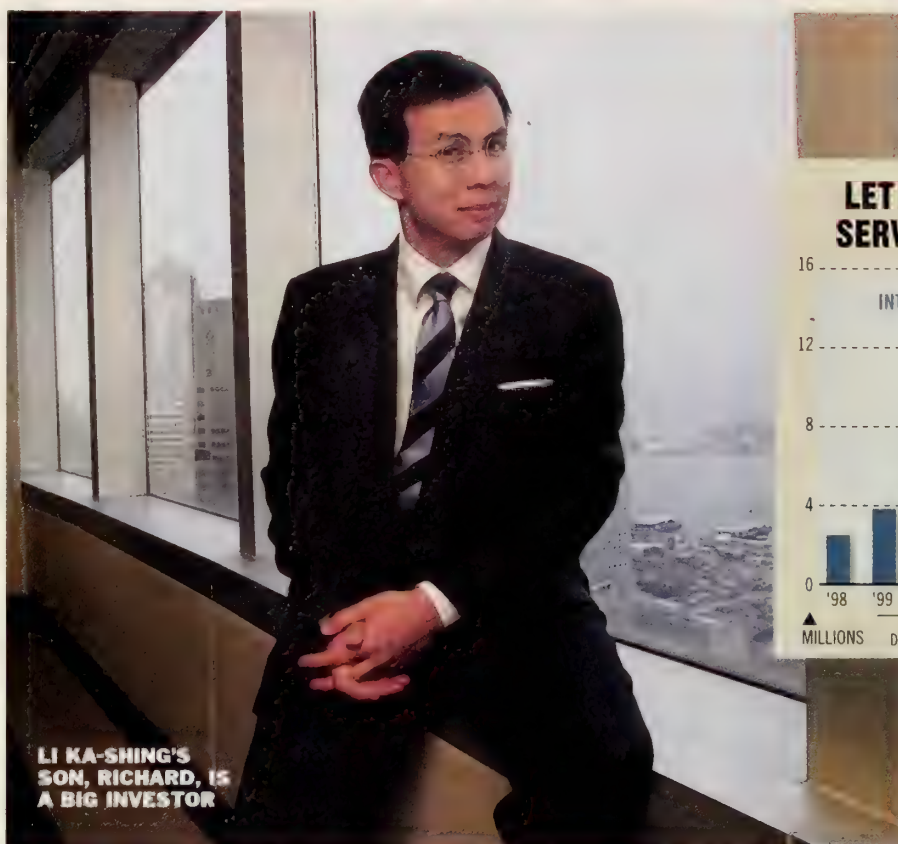
Such high expectations are impossible to meet. And now, support for large-scale assistance programs is waning among creditor nations. U.S. and IMF officials are investigating whether some of the \$4.8 billion lent to Russia in 1998 found its way into mobsters' pockets. Meanwhile, the agency's \$43 billion program for Indonesia initially made the situation worse and hasn't ended the systematic looting of the banks.

Clearly, the IMF needs to redefine its role. A blue-ribbon panel of the Council on Foreign Relations suggested that for a start, the IMF should return to previous lending practices. Traditionally, the IMF would lend a member any one year only the dues it ponies each year. The maximum drawings were capped at three times this so-

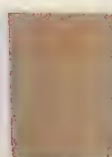
called quota. But Mexico, Indonesia, and Thailand received between five and seven times their quotas, while South Korea got a stupendous 19 times. Returning to the old guidelines in future crises would mean that the IMF could still provide reassurance while encouraging private banks and investors to put in their own cash.

Absent a decision on how the IMF should behave, some emerging countries are going to take matters into their own hands. In 1998, for example, Malaysia slammed its doors with currency and capital controls. At the time, its action was condemned as an undesirable step back from free markets. Now, Western economists believe such controls can actually be helpful.

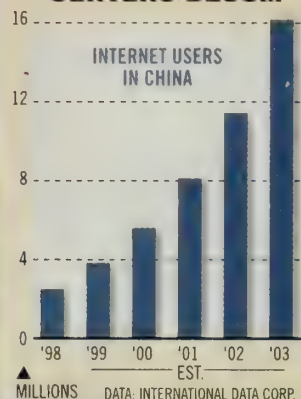
Obviously, institutions like the IMF still must step in when financial meltdowns scare away private capital. Yet reform advocates argue that banks and



LI KA-SHING'S SON, RICHARD, IS A BIG INVESTOR



LET A HUNDRED SERVERS BLOOM



its true meaning was anything but. The sign that the crackdown may be more political than practical is the nature of the CMGI deal. Wetherell's partner, Richard Li, the son of Hong Kong tycoon Li Ka-shing,

has legendary connections to China's power elite. So the fact that he's willing to go ahead and show that Beijing's ban won't last.

"TRIAL BALLOON" Still, Wu's Sept. 10 announcement rattled foreigners. Shares of China.com, a Chinese-language Web portal backed by Sun Microsystems, AOL, and E-World Networks, plunged by a third on

Nasdaq exchange, falling from 82 1/2 on Sept. 10 to 53 on Sept. 15, before rebounding. Since then, Internet executives have concluded that Wu's announcement was perhaps aimed less at choking foreign investment than at sending a political signal at home. The crackdown by Wu, a strident protectionist, came just after President Jiang Zemin had met with President Clinton to try to restart China's bid for entry to the World Trade Organization. "It sounds like a trial balloon," says an executive at one U.S. company with Internet investments in China.

In any case, the money has stopped flowing toward China Internet deals. On Sept. 16, just two days after the Wu announcement, Intel Corp. said it will develop an e-commerce service for China in partnership with Sohu.com, based in Beijing. AOL CEO Stephen Case is scheduled to visit Hong Kong on Sept. 28 to launch AOL's first Chinese language service. Most analysts view this as a staging point for AOL's eventual push into China itself, although AOL executives insist they aren't looking beyond Hong Kong now. It's a touchy issue because AOL is also an Internet service provider. And while the Chinese have been vague about content companies coming in, they've made it clear that they don't want foreign ownership of ISPs. That's why AOL and many other foreigners are staging their invasion of the mainland Internet market via phone lines from Hong Kong and elsewhere.

Still, many Western Net outfits are betting that the Chinese won't

TRADE

BETTING THAT EVEN BEIJING CAN'T CONTROL CYBERSPACE

As China threatens, foreign Net investors plow ahead

Can China's internal politics slow down the Internet? Not likely, if the biggest names on the Web don't blink. And it looks as if they won't. Despite a high-profile warning to would-be foreign investors in mid-September, on Sept. 23, David S. Wetherell, chairman of Internet holding company CMGI Inc., was scheduled to announce a \$350 million joint venture with Hong Kong-based Pacific Century CyberWorks (PCCW) aimed at selling Web content and e-commerce services to the exploding Chinese Internet market. On Sept. 28, America Online Inc. is expected to announce its own foray into China—from Hong Kong, for now. "By 2005, China will have the largest number of Internet users in the world," says Wetherell. "We have to be there."

The CMGI move comes just as one of China's most canny politicians has reiterated a ban on for-

eign investment in Internet companies. On Sept. 14, Information Industries Minister Wu Jichuan gave notice that China will begin enforcing the ban in order to reserve the rapidly growing market for purely Chinese companies. He also hopes to tighten government control over the information flowing into China over the Net.

While the pronouncement was clear,



WETHERELL AND AOL'S CASE: Wasting no time

low through on their threat. Content companies, in particular, feel they're on lid ground no matter what. Sina.com's initial public offering on July 12, raising \$84 million, sent a signal both Chinese officialdom and foreign companies that China's Internet sector was heating up. In July, its daily page views were up 30% over June, to 3 million. Second-quarter sales have more than doubled to \$1.4 million compared with one year earlier. "We see great investment in China.com as a great place to be and to watch developments in China's Internet," says Ann Brackbill, spokeswoman for AOL, which owns 10% of China.com.

STRATEGIC BASE. Now with AOL and the CMGI alliance, the momentum should accelerate. CMGI's deal is designed to give it a strategic base in Hong Kong to sell throughout Asia—but especially in China—CMGI's array of Internet advertising and user-profiling services, its Vista portal, and online communities such as Ancestry.com. The deal, which is expected to involve a stock swap giving CMGI about 5% of Sina's CyberWorks in exchange for 3.8% of CMGI, would grant CMGI rights to invest up to 10% in any CyberWorks deal. Li's goals for CyberWorks are ambitious. Next year he plans to launch a service using satellites to reach 110 million households in Asia and the Middle East. The next step, slated to begin in 2001, would be hooking up broadband Internet access, with content and e-commerce services provided by CMGI, among others. In late September, DaimlerChrysler Aerospace signed on to a CyberWorks joint venture which plans to spend \$1.5 billion by 2002 on satellites and earth-based gear to service the broadband venture.

Even if Wu's ban holds, Beijing can't stop the foreign invasion—short of cutting phone wires. Many of the early Chinese-language Net companies, such as Sina.com, and China.com, have built a big business on the mainland already, with their servers and corporate headquarters based safely offshore. "It's very hard to impose this ban if Wu wants to go through with it," says one Beijing-based analyst.

The last word will likely be Jiang's, and China Internet watchers expect him to show more support for an open investment policy. If he wants to move China onto Internet time, he'll have to.

By Paul C. Judge in Boston, with Dexter Roberts in Beijing and Bruce Anhorn in Hong Kong

WEB ADVERTISING

TO THE VICTORS BELONG THE ADS

Yahoo! and just a few other sites rake in the big bucks

One question plaguing Internet stocks lately has been whether companies that charge nothing for using their Web sites could succeed simply by selling advertising. The good news: Yes, companies can thrive on advertising alone. The bad news: The number of those that can do this seems to be shrinking, as marketers spend more and more with just a handful of big sites. According to the most recent survey by the Internet Advertising Bureau (IAB), the share of



ad revenues among the top 10 sites continued to expand, from 64% a year ago, to 75% in the first quarter of this year.

The most important sign of this phenomenon is the growing clout of the top site, Yahoo!, which confirms that it will raise ad rates next year. It's not giving out the details, but analysts peg the hike as high as 20%. And with its 80 million users, Yahoo! should be able to make the rates stick, analysts say. That mass audience is the closest thing in cyberspace to network TV—making it a must-buy for many advertisers. "We have a brand that commands a premium," says Anil Singh, the Yahoo! senior vice-president for business operations.

This isn't TV, however, and numbers alone won't work for many advertisers who want to take advantage of the new medium's ability to identify exactly who is in the audience. For these advertisers,

it doesn't matter how many eyeballs a portal can deliver: They want only motivated buyers. "We were disappointed with the portals. They didn't even reach our low expectations," says Peter M. Neupert, CEO of drugstore.com Inc.

What are some of the strategies not working on the Web these days? Banner ads is a top example. They're still the staple of online advertising, accounting for 58% of Net ad sales in the first quarter. But advertisers are beginning to see that such vaguely targeted ads bring little response. In an August survey, researcher Strategis Group found that 52% of the people polled hadn't clicked on an ad within the past week, and 40% couldn't recall the ads that induced them to click.

NEW WRINKLES. So ad rates for banners are on the decline. According to Forrester Research Inc., the cost for banner ads has dropped from \$20 last year for every 1,000 times an ad was displayed, to

about \$10 this year.

"The standard ad buy is not effective for most advertisers," says Scott Heiferman, CEO of i-traffic, a New York online ad agency whose clients include Staples Inc. and Walt Disney Co. Instead, Web sites are modifying or even dumping banner ads in favor of specialized programs, such as targeted e-mail or sponsorship agreements where a company is the permanent advertiser

on a site. For instance, women's site iVillage.com has created an area on its site for Ford that asks visitors to design their dream car.

But new ideas are still needed. While Forrester estimates that U.S. online ad revenue will zoom from \$2.8 billion this year to \$22.2 billion by 2004, Heiferman says that companies need more basic testing and creativity to hit those estimates. Yahoo! Inc., for example, will start charging extra for finely targeted ads. Other sites that understand their audiences are expected to mimic Yahoo! in raising rates. Meanwhile, at least for the big sites getting the most bucks, Yahoo! will spread some New Year's cheer with its rate hike. "It will give other companies the leeway to follow Yahoo's lead," says IAB Chairman Rich LeFur.

By Heather Green in New York, with Linda Himmelstein in San Mateo, Calif.

COMMENTARY

By Susan B. Garland

JUSTICE IS SWIFT—BUT TECH IS SWIFTER



MICROSOFT ON TRIAL

When I entered U.S. District Judge Thomas Penfield Jackson's courtroom last Oct. 19, I was eager to see the first antitrust trial run on Internet time. Justice Dept. officials crowed that it could bring a quick-hit case against Microsoft Corp. and prove that the creaky 1890 Sherman Act could zap predators in high-tech industries. By the New Year, I figured, those hard benches would be a distant memory.

But the months slogged on, and the only thing that seemed to move on Internet time was the industry itself. The extent of change in the tech world became clear on Sept. 21, when the now celebrity lawyers for both sides strode through the phalanx of press outside the rain-swept courthouse to present final arguments. As government prosecutor David Boies made his case that Microsoft had engaged in illegal anti-competitive behavior, I couldn't help feeling the litany of abuses had lost much of its relevance.

E-VOLUTION. That's not to say Microsoft attorney John Warden could explain away the charges. And for all the changes in the industry, his argument that the company does not have monopoly power in PC operating systems is no more persuasive now than it was 11 months ago. Warden was effective, however, when he laid out just how the Net and computer markets are morphing. The implication: While Justice may win on details, Microsoft can make the case that it's too late for judicial interference to do better than the markets are doing at correcting any problems.

The finale was a bit of a letdown in terms of theatrics. Boies' performance lacked the "gotcha!" moments that marked his cross-examination of Microsoft witnesses. The power of his final argument rested on the cumulative effect of the numerous company e-mails that he said proved Microsoft

"coerced, induced, forced many people in the industry to do its will."

In summing up, Boies wove a compelling story from his documents that began with Microsoft's fears of upstart Netscape Communications Corp. seizing the Net lead. He then used other documents to show Microsoft set out to use its Windows monopoly to kill off Netscape's browser. He argued that the "it's a changing world" argument "can't mitigate what Microsoft has done over the past several years." That may, in the end, convince Jackson to rule that Microsoft did violate antitrust laws—an outcome that some company insiders concede is likely.

part of its plan, AOL estimated that Netscape browser use would more than double between 1997 and 2002, hardly evidence that Microsoft was harming the market, Warden noted.

What also may help Microsoft avoid heavy penalties is the limited scope of the charges. Despite widespread fear in the industry that Microsoft would wield its Windows clout in all sorts of markets, as it allegedly did in browsers, Justice did not introduce evidence about those markets. Its case was about browsers. Although the government is mulling mandatory licensing of Windows or even a breakup, Microsoft could persuasively argue that a case about only one



By trial's end, it seemed that the litany of Microsoft's abuses had become irrelevant

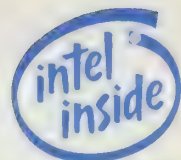
OUTSIDE WASHINGTON DISTRICT COURT BEFORE FINAL ARGUMENTS

Microsoft's hopes rest on Warden's ability to convince Jackson there's little he can do now that won't hurt more than it helps. Warden had his own documents, including those describing the three-way deal among AOL, Netscape, and Sun Microsystems. The papers showed, he argued, that this "large industrial alliance" planned "a coordinated attack on Microsoft" by creating an AOL-based system that would bypass Windows. As

product doesn't merit such measures.

So the trial on Internet time is over—sort of. Perhaps by Thanksgiving, Jackson will hand down his decision. But that's not really the end. Given the all-but-inevitable high court review of the decision, I'm planning my "Good-bye Microsoft Trial" blast now—for New Year's Eve, 2002.

Garland covers legal affairs for BUSINESS WEEK in Washington.



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MEDIA

NBC IS DEALING ITSELF INTO E-COMMERCE

And the new focus makes it look more like a keeper to GE

There are certain accepted truths in each new TV season: There must be more sitcoms dissecting the angst of hip young singles; Columbo will return for another made-for-TV flick; and General Electric Co. would like nothing better than to sell NBC.

In the wake of the Viacom-CBS merger, the National Broadcasting Co. may seem like even more of an anachronism than ever. After all, it's the only big TV network not part of a megamedia conglomerate complete with movie studio and television production. And conventional wisdom suggests that with programming costs rising and network audiences declining, savvy GE would do well to unload NBC while it's still churning out decent profits.

But hold that clicker. While NBC has explored many a merger, but done nothing on the megascale, it has made a string of moves that could keep the Peacock more attractive than ever to its corporate parent.

How? By buying into the Web, GE Chairman John F. Welch's current obsession. Suddenly, NBC could be more than a mere media company. It could transform 100 million viewers into GE e-commerce customers. "I don't think Welch is itching to unload it," says David J. Pizzimenti, who covers GE for Schroder & Co. in New York. "Now, NBC is a business that plays well into GE's e-commerce strategy."

Just since mid-September, NBC has made a small foray into online trading through a stake in Archipelago Holdings, and unveiled an online shopping strategy linking its Snap.com portal with ValueVision International, a TV-shopping channel 40% owned by NBC. At the same time, it shored up its position in old-line broadcasting by agreeing to pay \$415 million to buy into a fledgling second network, Paxson Communications Inc. Its founder, Lowell "Bud" Paxson, is

also the founder of Home Shopping Network. "He has a lot of shopping ideas—both e-commerce-related and TV-related," says NBC CEO Robert C. Wright, "and we'll get to them."

MANY TALKS. NBC's fascination with the Net is hardly new. It has led the pack among media players when it comes to the Net, starting with its 1996 launch, with Microsoft Corp., of cable channel/Web site MSNBC. More recently, NBC launched a CNBC.com Web site to complement its successful cable business news channel. Thomas S. Rogers, the president of NBC Cable and architect of the network's Web strategy, says he and

Wright have been talking to GE Chief Dennis D. Dammerman at ways to integrate GE's consumer-finance businesses with CNBC.com. In the term, expect to see GE insurance mortgage products sold on the site.

How will the strategy unfold? NBC plan to create a publicly traded vehicle—called NBCi—is critical to e-commerce effort and to the parent company. Both Welch and GE Chief Information Officer Gary Reiner are on its board. By creating a separate company, GE will have a currency—NBC stock—with which to buy more properties. When the deal to create NBCi closes in November, it will combine Snap.com portal as well as some of NBC Internet businesses with Xoom.com, a site that gives free Web services in return for the ability to direct-market. So far, though, investors are skeptical. Xoom stock is off 50% since the announcement in May.

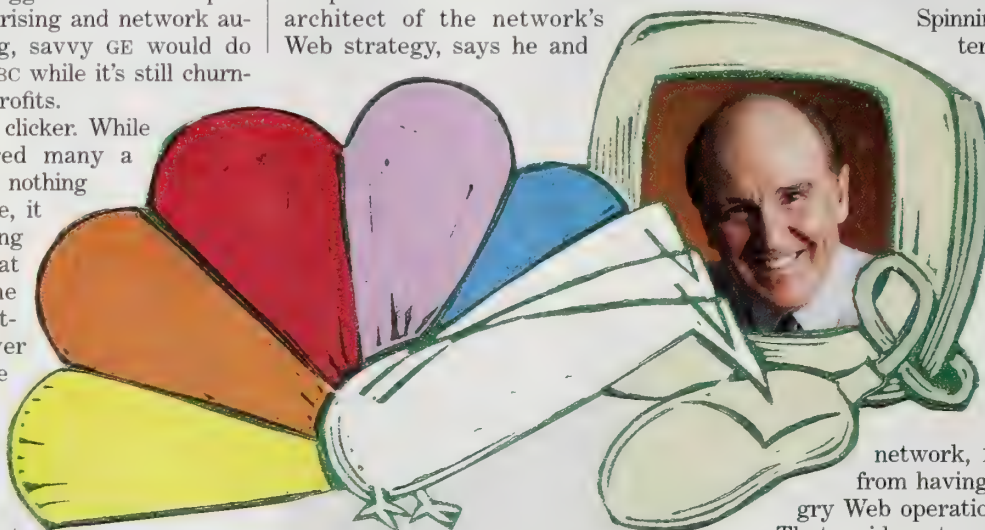
Spinning off the Web

enterprises is also good for NBC, which lives under orders from headquarters to produce more earnings—not just to cash flow the most media ants, measure themselves. While the Web unit will maintain synergies with the

network, NBC will be freed from having to finance a hungry Web operation's growth.

That said, not everything can be solved by putting an e in front of Wright admits that NBC still faces a big challenge. He predicts "more partnerships" in the year ahead. Overall, bull Nicholas P. Heymann of Prudential Securities Inc. estimates that GE has invested about \$900 million in NBC over the past several years, creating \$11 billion to \$13 billion in value. But rather than another big media deal, he predicts that GE will unlock some value for stockholders with a CNBC.com public offering around February, followed by MSNBC later next year. "These guys won't have to buy a studio," says Heymann. "GE has figured out how to skin this cat." Indeed, if its Web moves pay out, the network that seemed to be left behind may end up leading the pack.

By Richard Siklos in New York and Diane Brady in Greenwich, Conn.



MUST-SURF NBC?

NBC's Growing Stable of Online Enterprises

- Partnership with Microsoft in MSNBC.com gave GE early test bed for Web businesses
- NBC and GE Capital have invested together in a series of online ventures, including Telescan, Auto-by-tel, and Net2Phone
- NBC has announced SnapTV cable shopping channel and tied it to its Snap.com Internet portal
- Cable channel CNBC has taken 12% of fledgling stock trading system Archipelago



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COMMENTARY

By Mike McNamee

GOOD PENSIONS, BAD SALES PITCH

Evelyn F. Adams opened her mail last May and saw red. The 23-year IBM veteran was shocked to discover that the computer giant's pension overhaul would cut her benefits by 26%. She would now have to work until 2012 to get the same amount that IBM would have paid her in 2006 under the old plan. She was still irate after Big Blue backpedaled to allow her and 35,000 other workers in their forties to stay in the old pension plan. So irate that she came to Washington on Sept. 21 to urge Congress to crack down on the new "cash-balance" pensions adopted by IBM and some 300 other companies. "I want to make sure this never happens to another American worker," she says.

Only a Grinch could dismiss the pain felt by longtime workers whose companies cut pensions. But outrage is no substitute for logic. And by any test of logic, in today's economy, cash-balance pensions are better—for workers and employers—than traditional pension plans. Companies like IBM have run into trouble not because of the cash-balance plans themselves, but by introducing them badly. It's no surprise that IBM's initial offer prompted protests from Vermont to Minnesota and helped bring the issue before Congress.

Now that it's there, it's important for lawmakers to understand what's really at stake.

Cash-balance plans are a hybrid. Like traditional pensions, called defined-benefit plans, they are almost always funded by employers. But as in defined-contribution plans—like 401(k)s—their payout is based on what builds up in the worker's account, not a formula based on years of



IBM PROTESTERS: *Misplaced anger?*

service and pre-retirement pay.

Most significantly, a cash-balance plan's funding is spread across a worker's career. By contrast, traditional pensions accrue most of their benefits in the last decade of work.

That difference makes cash-balance plans better for mobile workers. Take a young worker hired at \$29,000. Under a cash-balance plan, if she changed jobs after five years, she could claim \$7,000 to roll over to an individual retirement account. But

she would collect only \$3,700 from a traditional pension. Traditional plans fit workers whose careers are spent at one company—but they're a shrinking minority. "One in nine workers sticks with one company for 30 years," says Eric P. Lofgren, director of benefits consulting

for Watson Wyatt Worldwide. "The other eight will do better with a cash-balance plan."

Employers gain several advantages in the switch to cash-balance: They can beef up their balance sheets by claiming surpluses built up in their pension funds and cut retirement costs. They can also redirect dollars to other benefits. Moreover, workers like to see just how much their funds are growing. Finally, managements struggling to staunch a "brain drain" of experienced workers can ditch the financial incentives built into many traditional pensions that encourage retirement at 55.

The switch creates some losers, usually folks like Adams—mid-career workers, who had counted on fat benefits accruing in their 50s and 60s. But there are ways to make the conversion more equitable. More than 75% of companies that convert let their most senior workers keep the old plan, according to

accountant PricewaterhouseCoopers. Employers also can avoid trouble by boosting already earned pension credits or adding stock purchase plans or richer 401(k) matches.

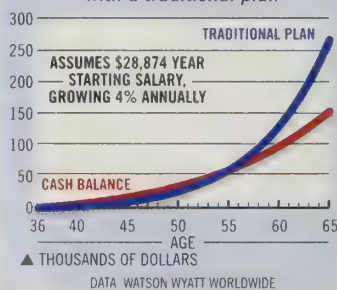
TIME TO THINK. Take Motorola Inc., which will switch next July from a traditional plan to a pension equity plan (similar to cash-balance). Each of its 70,000 workers has nine months to decide whether to stay with the old plan or switch. The company is launching seminars and online calculators to help employees understand the options. "Time and education to make an informed choice—those are key," says Rick Dorazil, Motorola vice-president for global rewards.

Companies that have watched IBM stumble don't need Congress to tell them how to help workers caught in a switch. Instead, it should focus on a real problem: Crafting policy that will help companies find ways to offer pensions to the half of U.S. workers who don't have them now.

McNamee covers finance from Washington.

THE NEW MATH

Cash-balance pensions reward short-timers, but veteran workers do better with a traditional plan





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DEALMAKERS

PHELPS DODGE: KING OF THE COPPER HILL?

Its bid for two mining rivals looks bound to prevail

After nearly 40 years at copper giant Phelps Dodge Corp., including 10 as CEO, Douglas C. Yearley had his eye on retirement next May. The 63-year-old opera and history buff, who had open-heart surgery last March, dreamed of leaving the Phoenix heat for his Cape Cod home overlooking Nantucket Sound.

Instead, Yearley has launched a hostile bid to halt the proposed merger of two other big copper miners—Asarco Inc. and Cyprus Amax Minerals Co.—and merge them into Phelps, instead. The latest move: On Sept. 22, Yearley sweetened his takeover bid for a second time, to \$2.83 billion, including almost \$1 billion in cash.

What's Yearley up to? He wants Phelps Dodge to lead the consolidation of the American copper industry and preserve the 165-year-old legacy of his firm, which ranks with DuPont and Procter & Gamble among the most venerable U.S. companies still bearing the founders' name. "He had been ready to retire, but now he's totally focused," says his wife, Anne.

SURVIVOR. For Yearley, a competitive but mannerly leader who studied metallurgical engineering at Cornell University, the acquisitions would crown a distinguished career. He joined Phelps in 1960 after a two-year stint as an engineer on the Polaris submarine project. After rising steadily through the ranks, he joined a cadre of executives in the early 1980s who overhauled Phelps Dodge, allowing it to skirt bankruptcy. As CEO, he made its operations more efficient and less hierarchical.

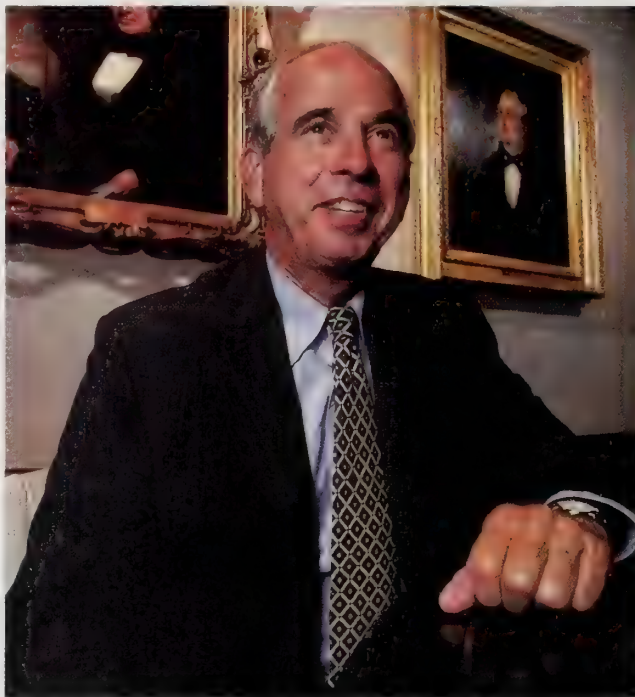
The acquisitions would leave Phelps Dodge the last big North American copper miner. And with a global market share of about 15%, it would be even with the world's biggest copper miner, Chile's state-owned producer, Codelco. More important, Yearley would leave Phelps in a

position to survive in an industry swamped by overcapacity, cheap imports, and prices near the all-time low.

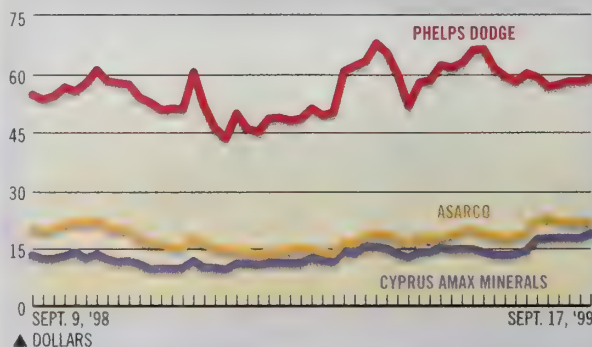
Phelps Dodge seems likely to prevail with its latest offer, which pushed up the prices of all three players. Asarco and Cyprus had no immediate comment: Their shareholders are due to vote on the original two-way deal on Sept. 30.

The two firms have been demanding some \$470 million more than Phelps's latest offer, arguing that they would

YEARLEY: *He's "totally focused," not set to retire*



COPPER SHARES: STUCK ON A BUTTE



DATA: BLOOMBERG FINANCIAL MARKETS

contribute 92% of total administrative and operational synergies and 91% of the cash in a three-way combination. Yearley calls their price "ludicrous" and their analysis "bogus."

PERSUASION. Yearley is winning support among analysts and shareholders for a three-way deal instead: "Cyp and Asarco realize the game is almost over, and the only viable alternative is to sit down and talk to Phelps," says Michael J. Chren of Orlando's DePrizio Race & Zollo Inc., which owns just over 1% of Cyprus' shares.

To persuade shareholders of the rival firms, Yearley has been putting in long hours crisscrossing the continent and working the phones. By Sept. 22, Yearley says he will have met or spoken

with half the rivals' shareholders. "He's driven," says Chren.

If consolidation is the game, Phelps should win it, Yearley figures. It's the largest and most liquid company in the copper sector, and it has managed to perform impressively despite the pricing squeeze. It posted net earnings of \$1.2 million in the three months ended July 30, compared with losses of \$1.1 million at Denver-based Cyprus and of \$21.1 million for New York-based Asarco during the same period.

Yearley can claim much of the credit. He helped save the company from bankruptcy in the early 1980s as part of a team that closed mines and smelters, cut one-third of the workforce, kicked out the unions, and moved the company's headquarters from Manhattan to Phoenix. "We came out of the '84 disaster traumatized," says Yearley. "We concentrated for five years on survival, and since then on growth and optimization."

Still, in an industry as traditional as mining, management concerns go beyond price. Asarco has been operating for a century, and Cyprus since 1916. Both managements would be loath to see their names buried forever. "It's not only about money but about whose portrait will be on the boardroom wall 50 years from now," says an analyst. For Yearley, knowing that the Phelps Dodge lineage prevails would make the Nantucket Sound breezes even sweeter.

By Steven V. Brull in Phoenix

COMMENTARY

By Peter Coy

DO THE BEARS HAVE SOMETHING TO GROWL ABOUT?

For once, David W. Tice's timing was immaculate. The fire-and-brimstone Jeremiah of Wall Street held a conclave of fellow bears in New York on Sept. 21, the very day the Dow Jones industrial average fell 225 points, the beleaguered dollar sank again against the yen, and Washington reported a bigger-than-expected increase in the U.S. trade deficit.

Plus, it rained. All in all, the deal atmosphere for propounding the theory that the U.S. economy is headed straight to hell. Tice and his compatriots argue that Americans are clinging to the skin of a giant asset bubble that's sure to pop and cause a shock wave of bankruptcies and unemployment. They fault Federal Reserve Board Chairman Alan Greenspan for letting the stock and real estate markets inflate perilously by keeping interest rates too low. The inevitable bursting of the bubble "is a risk to freedoms of individuals and our entire nation, and most important, to free markets," said Tice, president of Dallas-based David W. Tice & Associates Inc., which runs the Prudent Bear Fund. "This is a tragedy down the road."

Sitting among 200 dour investors and brokers absorbing the negative vibes at "The Credit Bubble and Its Aftermath," I half expected the Wal-lorf-Astoria's giant crystal chandelier

problems, was the fifth-worst of 3,195 funds in Morningstar Inc.'s database.

Greenspan is well aware that the Fed needs to take away the punch bowl when the party starts getting too fun. He has already started siphoning off some of the joy juice. It's just that he's more circumspect than the bears about when the right time to do that is. Unlike the doomsayers, he is not willing to say for sure that asset prices now—right now—are overinflated. Doing so, he said at a

running record trade deficits.

"Like Blanche DuBois, the U.S. economy is dependent on the kindness of strangers," says Marshall A. Auerback, a consultant for Tice. Stuart Feldstein, founder of SMR Research Corp., says lower-income Americans are taking on enormous debts that they will be unable to repay if the economy turns down. From 1992 to 1998, Feldstein says, credit-card issuers raised the ceiling of potential borrowings from \$770 billion to \$2.5 trillion.

And less than 20% of available credit has been tapped, which means strapped consumers can get far deeper into debt without filling out a single loan application.

"DR. DOOM." It's a measure of the pessimism of the conference that economist Henry Kaufman, who was known as "Dr. Doom" at Salomon Brothers in the '70s, came across as middle-of-the-road. While faulting Greenspan for letting a bubble form, he declined to say that rates should be raised now. "When you miss your timing," he noted, "it's very, very difficult and complex to throttle back."

As Kaufman knows, it's one thing to warn about excesses and another to risk choking off healthy growth. Burly former Fed governor Lawrence D. Lindsey, a ray of sunshine compared with his fellow speakers, says he thinks Greenspan has gotten things just about right. Lindsey—speaking on his own and not, he stresses, in his capacity as economic adviser to GOP Presidential hopeful George W. Bush—thinks a certain amount of speculation is necessary in financing risky new ventures: "It's vitally important to let capital flow into new businesses. As long as [markets] don't get too far out of hand, it's an experiment worth running." So far, the results favor the bulls.

Coy is associate economics editor.



BUBBLE Record trade deficits, credit-card debt: "Like Blanche DuBois, the U.S. economy is dependent on the kindness of strangers"

to crash to the floor on cue, like a scene from *Phantom of the Opera*.

Alas, it held fast. With markets, as with falling chandeliers, timing is everything. That's why being a bear is such a frustrating stance these days. If the financial and real estate markets really are overvalued, a day of reckoning is sure to come. But bears have been saying that for years. Over the past 12 months, Tice's fund, which short-sells stocks based on analysis of underlying corporate

Fed conference in Jackson Hole, Wyo., on Aug. 27, would mean controverting the "judgments of millions of investors, many of whom are highly knowledgeable about the prospects for the specific companies that make up our broad stock price indexes."

That said, the bears' message is worth at least a listen. They argue that Americans are spending beyond their means. To fund investment, the U.S. is importing huge sums of capital from abroad—and consequently

You could have all the disk and tape space in the world and still not have a smart storage solution. After all, if your storage system lacks the intelligence to allocate data evenly, it will probably be equally inept at finding the information you need. A Storage Area Network (SAN) solution from StorageTek has built-in intelligence that gives you easy access to all your critical data. For intelligent SAN solutions, visit: www.storageTek.com/intelligent



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TOBACCO MAY UGH UP MORE

TOBACCO INDUSTRY MAY be facing its biggest litigation assault yet. On Sept. 22, Justice Dept. filed a civil suit against the largest cigarette companies, charging they conspired since the 1960s to mislead the public about the dangers of smoking. The government hopes to recover some of the \$20 billion it spends each year to combat smoking-related illnesses under the Medicare, Medicaid, and military health programs. The suit is filed under three federal statutes, including the Racketeer-Influenced & Corrupt Organizations Act (RICO). It accuses Philip Morris, R.J. Reynolds Tobacco, Brown & William-

son Tobacco, and others of withholding information on the effects of smoking. The suit is similar to one settled by the states for more than \$200 billion to recover funds paid out by their Medicaid programs.

BELLS RING FOR WIRELESS CARRIERS

THE BEAT GOES ON. AS U.S. wireless customers demand ever-broader reach from their phone companies, carriers continue to pair up. Bell Atlantic and Vodafone AirTouch said on Sept. 21 that they will merge their U.S. cellular networks, creating the nation's largest wireless carrier. The new company will serve 20 million customers generating more than \$15 billion in revenue. A day earlier, VoiceStream Wireless said it will buy Aerial Communications for some \$3 billion. The two carriers are licensed to serve 22 of the top 25 U.S. markets. What's next? Analysts expect VoiceStream to go after southeastern carrier Powertel.

XEROX ADDS TO ITS SHOPPING CART

WHAT'S THE FASTEST WAY to develop a product line? Buy it from someone else, of course. That's how Xerox hopes to turn up the heat on Hewlett-Packard. On Sept. 22, the copier giant said it will pay \$950 million for the color printing and imaging division of Tektronix. The deal gives Xerox some much-needed color printers in the office market and catapults it to second position behind HP, with a 30% market share. Analysts applaud the acquisition as a healthy addition to Xerox' line and distribution network but aren't racing to pick up the stock just yet. Xerox says its shopping spree is far from over.

HEADLINER: GEORGE SHAHEEN

WEBVAN NETS A CEO

Who can't be seduced by the Web? George Shaheen shocked colleagues when he announced on Sept. 21 that he would step down after 10 years as Andersen Consulting's CEO to run Silicon Valley upstart Webvan Group, an online grocer founded by Louis Borders of Borders Group books fame.

The news left Andersen reeling. Shaheen, 55, departs as Andersen nears the climax of a nasty divorce from Arthur Andersen, the audit giant. Shaheen escalated the fight in 1997 when he filed for arbitration on how to divide the companies. That leaves his

lieutenants to handle a possible \$10 billion fee Arthur is demanding for Andersen's independence. Shaheen's

exit on the heels of e-commerce head Rudy Puryear causes a brain drain. "This really leaves them in the lurch," said an ex-Andersen exec.

Shaheen's not talking, citing Webvan's pending IPO. But some insiders wonder if he can make the shift from a giant bureaucracy to a cozy shop with only \$395,000 in sales in the first half of 1999. Maybe he will be able to hire a consultant to help with the transition.

*By Roger O. Crockett
in Chicago*



CLOSING BELL

BRUISED APPLE

Since 1997, Apple Computer has been the comeback kid of Wall Street, by stopping nasty surprises and regularly exceeding expectations. But on Sept. 20, it stumbled: With drops for its most profitable new Macs in short supply, fourth-quarter earnings will be squeezed. Apple shares fell 12%, to \$69, and dragged down the market. Still, analysts are calm: "It's not lost revenue, just deferred it," says Goldman Sachs' Richard Schutte. The stock closed on Sept. 22 at 0%.



PT 8: '99 SEPT 22
DATA: BLOOMBERG FINANCIAL MARKETS

WALL STREET BIDS GOOD-BYE TO 24⁵/₁₆

YOU CAN STOP TRYING to convert fractions in your head. The Securities Industry Assn. asked on Sept. 22 for regulators' approval to roll out decimal stock pricing next July. The first phase would price up to 40 companies' stocks in nickel increments—not the traditional quarters, eighths, and sixteenths. By October, 2000, all stocks may trade in any decimal increment, driving the spread between dealers' selling and buying prices for shares from 6.25¢ now down to as little as 1¢.

IBM: AFTER LOU, WHO?

ALTHOUGH IBM DOESN'T HAVE mandatory retirement at age 60, that has been the unofficial deadline for CEOs for more than 20 years. So, Big

Blue watchers are speculating about who might succeed Chairman Louis Gerstner if he leaves on his 60th birthday on March 1, 2002. The top inside contender is Samuel Palmisano, who has run IBM's \$29 billion computer services business, one of its most successful operations. Palmisano, 48, was given a chance to shine further on Sept. 20. He'll head the \$10.6 billion server business, which has been losing market share.

ET CETERA...

- Unilever says it will trim 1,000 brands from its package-goods portfolio.
- 3Com reported that its first-quarter profits rose 38%, to \$119 million.
- Chairman Philip Condit said Boeing would probably build a stretched 747.
- United Technologies said it will ax 9,135 more jobs, bringing total cuts to 14,500.

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** Stanford Resources, Inc. Monitrac U.S. Desktop PC Independent Monitor Shipments Q2 '99 and Display Search, Quarterly Supply vs. Demand Study: Desktop Monitors Q2 '99.

LEE WALCZAK AND RICHARD S. DUNHAM

"S GORE VS. GORE AND GORE IS LOSING

is Al Gore like Iridium? He has lots of balls in the promotes cutting-edge technology—and is headed for pter 11.

—Joke making the rounds in Washington

orgive Tony Coelho if he doesn't chuckle at comparisons between his candidate and the failed satellite venture. The ex-California congressman was tapped in May to head the ing Gore campaign. Coelho—whose last job was selling s and laying off employees as CEO of engi- firm ICF Kaiser International Inc.—right to work. He hired busloads of media ens and pollsters. And he forced Gore to in on the core issues of prosperity, im- ing education and health care, and fixing ions.

ist one problem: While the new manage- at Gore Inc. pored over flowcharts, cus- ers flocked to Bradley's department store. 7 polls show the Veep in a virtual dead with ex-New Jersey Senator Bill Bradley ew Hampshire and New York.

olitical pros now caution that unless Gore kly changes public perceptions, the once tly regarded Bradley insurgency could ck Gore's plans to roll to the nomination. s thing is starting to slip away," frets one ative with close ties to the First Family.

oelho is putting in 14-hour days, but his exertions haven't d Gore's stock yet. "Tony has done some good things, but problem is Gore," says a party consultant. "He looks more ore like [failed '72 front-runner] Ed Muskie—the dutiful der with Establishment support but no grassroots backing."

bit apocalyptic, perhaps, considering that the Iowa cau- s aren't until Jan. 31. But there's no doubt that Gore's s run deep. Among them:

• **wrong stuff.** Despite unprecedented responsibilities in

foreign affairs and technology policy, Gore still isn't seen as Presidential. In an ABC News-Washington Post survey released on Sept. 7, only 38% saw him as "a strong leader."

■ **The Clinton curse.** Revulsion over White House scandals is hurting. A CNN/Gallup/USA Today poll taken on Sept. 10-14 found that, by a 52% to 27% margin, the Clinton connection made voters less likely to pull the lever for Al.

■ **Bush-whacked.** With the Texas GOP governor cruising, Gore's iffy general-election prospects have some Democrats spooked.

While Bush holds a 17% lead over the Veep, Bradley cuts that margin in half, according to an NBC News poll. Because Gore-Bradley policy differences are slight, party regulars might be tempted to change horses. "If Gore looks like he can't put it together, Bradley would be acceptable to virtually all Democrats," says Emory University political scientist Merle Black.

Coelho, of course, has a turnaround plan. He's speeding up endorsements by national and local pols. Ground troops are being rushed to New Hampshire and other trouble spots. And he has scrapped the "quick kill" scenario, girding instead for a protracted struggle to painstakingly pile up delegates. The Holy Grail: votes of 800 party leaders who have automatic seats at the convention and account for 18% of the nominating tally.

"Tony realizes we're in for a tough fight against a very credible candidate in the form of Bradley," says Gore delegate-counter Tad Devine. "You're going to see some powerful stuff from our side." What's more, the Gore camp thinks that as Bradley fills in details of his "big ideas" agenda, his appeal will wane.

Still, Gore must move fast. Unless he finds his footing, political pros say even the best ministrations of Coelho & Co. won't save his campaign.



GORE: Hearing footsteps

CAPITAL WRAPUP

IE MARKET'S FUTURE?

Securities & Exchange Commission chairman Arthur Levitt Jr.'s vision for st century stock markets, scheduled be unveiled on Sept. 23, would de- ive the New York Stock Exchange, asdaq, and other bourses of exclusive ghts to trade companies' shares. The o securities cop wants a system ere Nasdaq dealers would make rkets in NYSE-listed stocks like Gen- al Electric Co. and Big Board spe- dlists would fill orders for such Nas- q companies as Microsoft Corp.

The NYSE, Nasdaq, and fast-growing electronic rivals would compete for or- ders by trying to trade faster and cheaper. The SEC would link markets with an electronic system where stock orders with specified prices would be posted for trading anywhere. SEC staffers haven't yet worked out de- tails—like how to ensure that dealers on different markets offer all investors an equal chance at getting shares at the best price—but hope the key play- ers will flesh out Levitt's blueprint.

Achieving his vision requires three changes. The SEC chief is nudging the

NYSE to drop its Rule 390, which bars most listed stocks from trading on oth- er markets. The SEC also expects to- day's 12 traditional exchanges and new e-markets to consolidate, perhaps to three. Finally, Levitt will push the NYSE and Nasdaq to merge their mar- ket monitors, creating one super-regu- lator under SEC supervision. But each market will probably continue to police its own trading for front-running and other violations. SEC aides figure that local cops on the beat will best be able to detect trading shenanigans.

By Mike McNamee



TAKEOVER PRIZE: Newbridge Capital plans to steer Korea First Bank toward more consumer business and small-b

SOUTH KOREA

GREEN LIGHT AT LAST

A banking deal may mean Korea Inc.'s barriers are falling

As his private jet touched down in Seoul on Sept. 13 after the long flight from San Francisco, Newbridge Asia Managing Director Daniel A. Carroll thought he could finally start to celebrate the closing of one of Asia's biggest deals of the year. Two days later, a disappointed Carroll left Seoul empty-handed. Once more, the on-again, off-again talks between Newbridge Capital and the Korean government to take over insolvent Korea First Bank had collapsed after the two sides bickered over final details, raising fresh doubts that Seoul was serious about following through with bold measures to reform its coddled financial sector.

But this time, the story didn't end with another jaded foreign investor sputtering about the futility of dealing with Korean bureaucrats. Just two days later, Newbridge finally signed a landmark deal that promises to change the face of Korean finance. Just as Newbridge was ready to call it quits, the talks were pulled back from the brink. Seoul signed a binding agreement to hand Newbridge 51%—and full control—of one of the country's largest financial institutions, for \$417 million. And if Newbridge cannot recover Korea First's bad debts, the government will pay face value for the loans.

For investors jittery about reform, the deal is a godsend. "The sale will re-

ally help stabilize the local financial market," Korea First President Ryoo She Yul told reporters when the deal was announced. The deal, on the heels of the indictment of Hyundai Securities Co. executives and the announced breakup of once mighty Daewoo Group, is the most convincing evidence yet that the arm of Korea Inc. is buckling. By allowing a major bank to fall into foreign hands, the government intends to underscore that the old crony business culture is on the way out. Presidents and bureaucrats have long used banks to shove funds to favored industries, undermining the health of the financial system.

A truly independent banking system



departure from the chaebol focus

an indispensable building block for a market-friendly economy. Under San Francisco-based Newbridge, a major bank now will be run by managers trained in evaluating borrowers on the basis of risk rather than political connections. Korea First's new owners edge to boost credit to consumers and small and midsize businesses, a big departure from the old focus on *chaebol*, Korea's huge conglomerates. Newbridge has experience in workouts: One of its major investors, the Texas Pacific Group headed by David Bonderman, turned around a bankrupt thrift during America's savings-and-loan crisis. If it can succeed with Korea First, the firm could force other banks to reform.

TORTURED PROCESS. The sale never could have taken place had it not been for Korea's 1997 economic collapse. In return for a record \$58 billion bailout, Seoul promised the International Monetary Fund it would close bad banks and get out foreigners. The sale of Korea First and Seoul Bank was part of the pact. But the tortured one-year process of closing the deal shows how reluctantly Korea Inc. has embraced reform.

Korea First certainly needed serious help. It was the largest lender to Han-

bo, a steel and construction conglomerate that collapsed with \$6 billion in debt in January, 1997. Its exposure to Hanbo alone equaled 86% of its capital base, enough to make it insolvent. Korea First also had lent to Kia Motors Corp., a bankrupt carmaker, and to Daewoo. In all, the government injected \$5.8 billion to keep the bank afloat. Two former Korea First chiefs have been convicted of corruption.

At first, Seoul's financial mandarins appeared to move fast. They faced pressure to reach an agreement to sell the two banks by the end of 1998. Foreign investors were skeptical that Kim's government, which took office in February, 1998, was fixing the economy. The *chaebol* were resistant to restructuring. Seoul badly needed a victory to bolster confidence.

When the government opened bidding for Korea First last October, most analysts gave the edge to such banking giants as Citibank and ABN-Amro. But Newbridge—an investor in distressed assets—emerged as the surprise winner. Among other things, it vowed to give Seoul a bigger share of profits than rival bidders if the bank turns around. On Dec. 31, after three weeks of exhausting talks, top officials of Korea's Financial Supervisory Commission and Weijian Shan, Newbridge's Hong Kong-based managing director, celebrated with champagne a letter of understanding to sell Korea First.

It was the kind of Asian acquisition that Newbridge and Texas Pacific Group were looking for. Recent buyouts by Texas Pacific include Continental Airlines, Oxford Health Plans, while Newbridge has picked up a semiconductor-packaging unit of Indonesia's Astra International.

At first, the Korea First deal seemed unstoppable. Newbridge set up a war

room occupying an entire floor in Korea Exchange Bank's headquarters. It brought an army of Western and Korean consultants, lawyers, accountants, and investment bankers for the complex due diligence needed to buy a bank with around 400,000 loans.

But as Newbridge learned, a signed

agreement is just the beginning. Talks with the government slowed after HSBC Holdings agreed to buy Seoul Bank in late February on terms that were more favorable to the Koreans than what Newbridge was offering. A May deadline to sell Korea First came and went. Shortly afterward, Newbridge lost its exclusive rights to negotiate the deal. Rating agency Moody's Investors Service voiced its fears over Korea's faltering reform efforts. As the economy started recovering, talks stopped because top Korean officials began to reconsider the terms.

But Newbridge got a break when HSBC's deal to buy Seoul Bank fell apart on Aug. 31. That focused attention on apparent backsliding on reform and put pressure on Seoul to restart talks over Korea First.

When the deal closes, probably by January, Newbridge plans to install its own top management. Key to its turnaround plan is GE Capital Corp., a Newbridge investor. GE will put money into Korea First and use its consumer-finance expertise in credit cards and auto loans, execs say. The government has already lopped about one-third of Korea First's staff.

Now the focus is on growth. "We only make money if we grow the assets and put a lot of performing loans on the books," says Newbridge's Carroll. Korea's bureaucrats may wish they hadn't been forced to sell. But it will likely turn out to be a sweet deal indeed for Koreans.

By Mark L. Clifford in Hong Kong



BONDERMAN: Dogged

NEWBRIDGE'S LONG ROAD

OCTOBER, 1998 Seoul solicits bids for Korea First Bank in accord with terms of record IMF bailout.

DECEMBER, 1998 Newbridge wins bid and signs pact to buy Korea First.

FEBRUARY HSBC signs MOU to buy Seoul Bank with better terms for Korean government than Newbridge's Korea First offer.

MAY With talks snagged, deadline for closing the deal passes.

JULY Creditors roll over debts of Daewoo, hurting Korea First, which is owed \$2.3 billion.

SEPTEMBER On the brink of collapse, talks resume. Newbridge signs deal to buy control of Korea First for \$417 million.



INDONESIA

WAS TIMOR'S CHAOS PART OF A PLAN?

Jakarta may have set out to create a client state

The devastation was all but unthinkable only three weeks earlier, when East Timor voted for independence from Indonesia. But as U.N. peacekeepers landed in the tiny territory on Sept. 20, what they saw was all too real. In Dili, the capital city on Timor's north coast, shops, offices, schools, hotels, and homes were smoldering ruins. Marauding militias sup-

ported by the Indonesian army had sabotaged power plants, water works, and electricity and phone lines across the former Portuguese colony.

Thousands of Timorese jammed the city's squalid beachfront clutching all that remained from abruptly shattered lives—a chair, a cracked mirror, a towel. Only when troop ships anchored in the harbor did people begin walking back

into the sacked city. Says Matheus da Costa, a 28-year-old electrician whose home was looted: "We feel safe now that the peacekeepers are here."

It may be too soon for that. Several days after Australian-led troops arrived, much of Dili and almost all of the countryside—still unsecured. But even assuming the militias are subdued, the international community now faces the enormous challenge of turning a ravaged broken society—one that was never developed to begin with—into a nation that can support itself. East Timorese are years away from regaining a sense of social and economic coherence. They now have neither government, civil service, nor infrastructure. They can no longer feed themselves, since t-

BURNED OUT

Sabotage has left Dili without power, water, or phone lines

Dire Straits

Challenges in East Timor

POPULATION

Most Timorese are homeless. In Dili and other cities, many houses have been looted and burned

INFRASTRUCTURE

Power plants, water systems, the electricity grid, and telephone lines have been sabotaged

INSTITUTIONS

The territory has no government, civil service, currency, or central bank. Local expertise is limited

RESISTANCE

Army-backed militias have regrouped to partition districts where economic activity is concentrated

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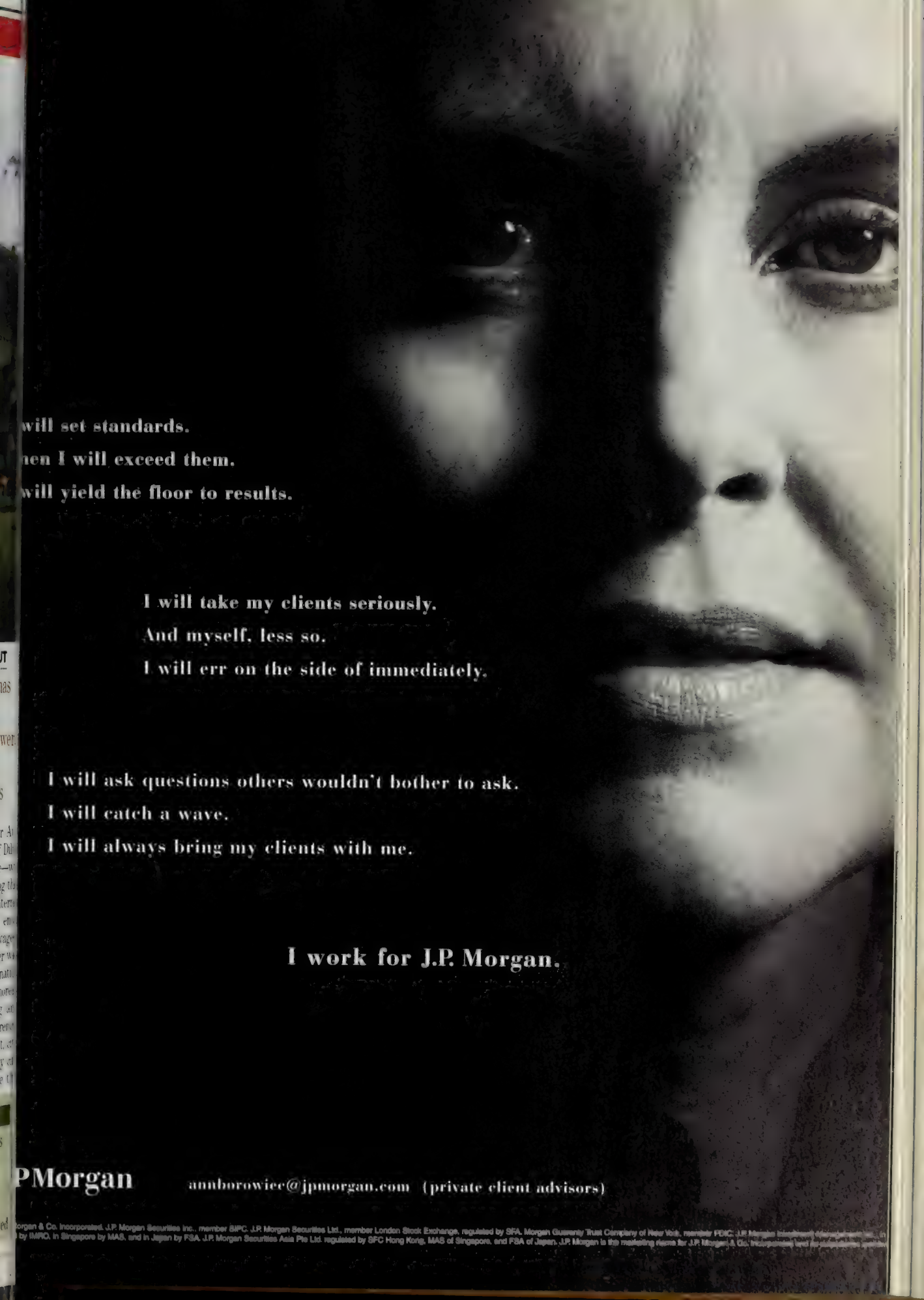
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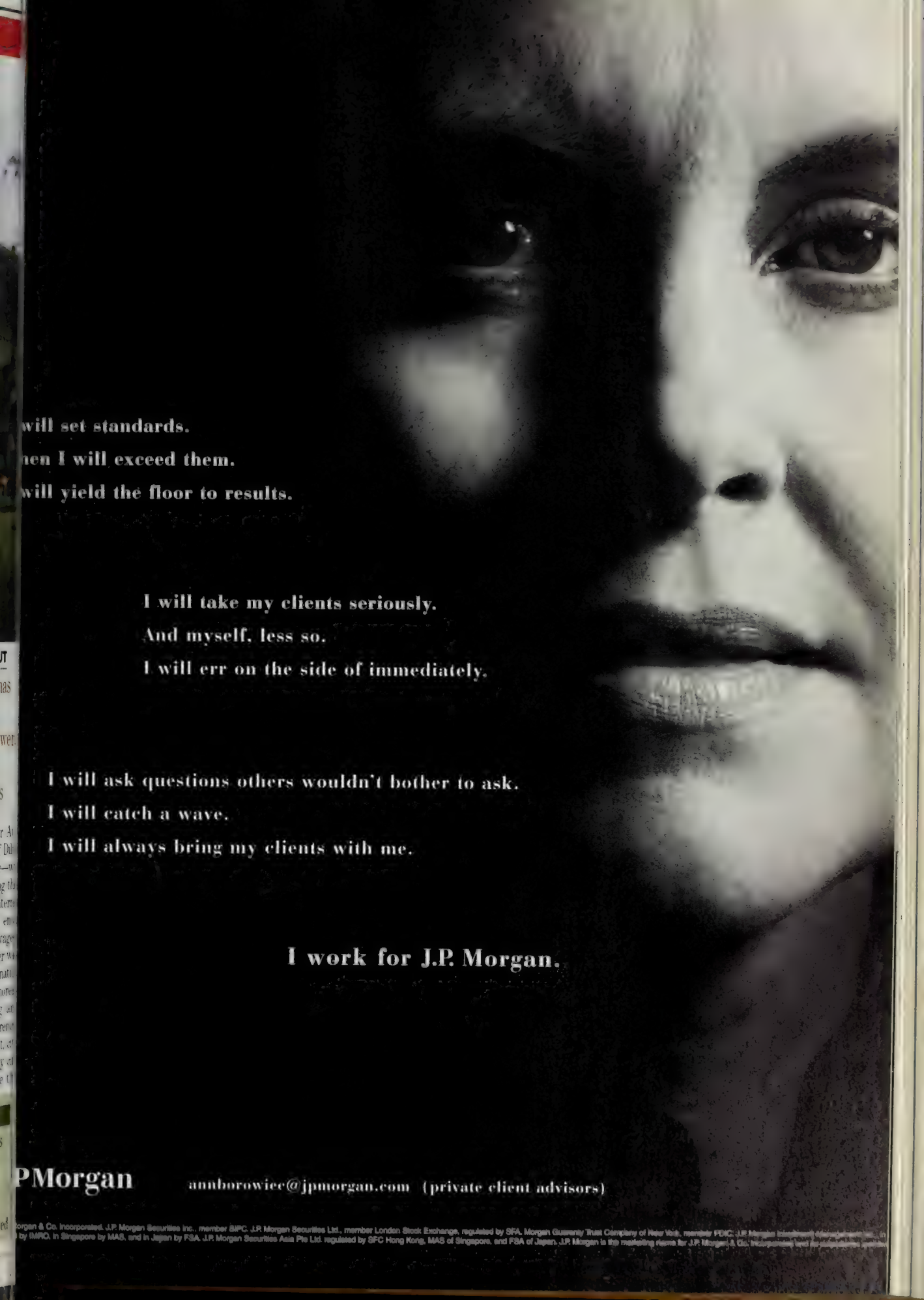
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economy, rooted in agriculture, is a ruin.

The U.N., the World Bank, and other institutions are already planning East Timor's reconstruction as a sovereign state. The strategy is to create a modest but sustainable economy with small, well-targeted doses of aid. If all goes well, independent East Timor will learn to pay its way by exporting coffee, processing foods, and hosting tourists. What will soon be the world's newest nation should eventually see revenues from offshore oil and gas deposits.

But to the 850,000 East Timorese, these are only dreams. The chaos militias and the Indonesian army continue to inflict is no less than econocide. What appeared to be random violence after Timor's Aug. 30 vote now looks like part of a coldly calculated plan to depopulate much of the territory and reduce it to an economic basket case reliant on Indonesia. Almost certainly, Timor is also intended as a warning to Indonesian provinces rebelling against Jakarta.

COUNTING HOUSES. The army now appears intent upon claiming the coffee-growing hill country, East Timor's economic heartland, as part of Indonesia. As the first U.N. troops arrived, an anti-independence militia calling itself the National Unity Front asserted that it intended to retain control of eight of East Timor's 13 administrative districts. U.N. troops will move quickly to quell such resistance. "Partition is out of the question," says a foreign official helping to plan East Timor's reconstruction. "It's totally unacceptable to the international community." But diplomats in Jakarta say militias in neighboring West Timor could remain a destabilizing force for years to come.

The immediate task facing the U.N. and aid agencies is to rebuild houses, restart utilities, and restore social services such as hospitals and schools. "It's not a question of counting the houses that have been burned down," says Jacqueline L. Pomeroy, a World Bank economist based in Jakarta. "It's counting the houses left standing." In Darwin, Australia, economists and administrative experts are developing blueprints for a central bank, a currency system, and a civil service of 15,000. Once an assessment team sizes up the damage East Timor has suffered, it will

report to the first meeting of aid donors. That is likely to take place in New York in October.

Portugal and Australia—the former colonial power and Timor's wealthiest neighbor—are likely to lead the donors' club. These two countries and various U.N. agencies are expected to pour \$300 million into Timor this year—and \$100 million annually for the next three years. These are significant sums. By comparison, Indonesia spent \$50 million a year on development projects in East Timor; its operating budget—including salaries for a bloated bureaucracy of 28,000—was \$64 million. "There will be no shortage of money going into East Timor," says the World Bank's Pomeroy. "The prob-

SORRY, MATE

Australian-led troops are disarming militia in key areas



lem is capacity. In terms of resources, how much can this place absorb?"

Remaking East Timor is not, indeed, a short-haul project. João Mariano de Sousa Saldanha, a respected Timorese economist, thinks it could take 10 years to bring the new nation's per-capita income back to \$200—its 1997 level and a fifth of Indonesia's average that year. While other economists say that's pessimistic, Saldanha—who is likely to play a prominent role in the first national administration—thinks it will also take a decade for Timor to finance its operating

budget. "Once we can cover the running bills, we'll be O.K.," he says. "We go to the international community for help developing the economy."

That economy is certain to rest on two hard-currency earners: coffee and long-established plantation crops, such as tourism. Although Timorese coffee has mixed reviews for quality, it has a long history following. Last year the export crop—worth \$20 million to Timor

growers—went to Starbucks Corp., the U.S. coffee chain. What was expected to be a \$100 million bumper crop this year won't be harvested. As to tourism, it will take time to change East Timor's image from gunshots and burning houses to hot spots and fruity drinks. But it has a natural market: Darwin is 1,000 miles from Timor's pristine beaches.

OIL CLASH? Looming large among Timor's unknowns are offshore oil and gas fields managed by Indonesia and Australia. Most are not scheduled to produce commercially until 2003. While Timor is likely to inherit Indonesian rights, the new government in Dili will probably clash with Jakarta over the plan that allows Australian companies to develop the fields. Says Saldanha: "It's too early to talk about oil."

Or timetables for much else. No one yet knows how long it will take even to stabilize East Timor—economically or militarily. Tensions in Jakarta are weighing heavily. Gen. Wiranto, the army's commander in chief, may face a showdown with legislators and students over a new security bill and plans to postpone a presidential election set for November. If a nationwide upheaval erupts,

plans to rebuild East Timor would probably have to be reclassified—from difficult to all-but-impossible.

While Timor's tragic fate seems at least partly intended to keep rebellious provinces such as Aceh and Irian Jaya in line, it has backfired badly in Timor itself. After a baptism of blood and fire, the Timorese are more determined than ever to build their own nation. "Now it's murderers and burners vs. independence," says one foreign observer. And that's not much of a choice.

By Michael Shari in Dili

MISSION

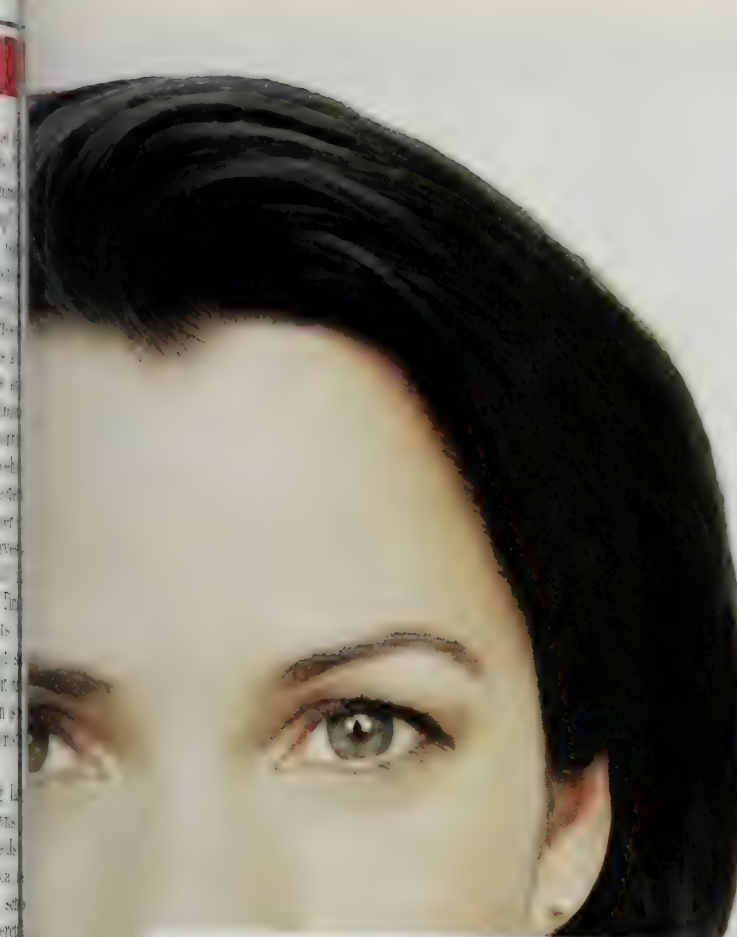
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FRANCE

LETTING SOME AIR OUT OF MICHELIN

How un-French: The tiremaker is cutting jobs and costs

When 2,000 angry workers rallied outside the headquarters of Michelin in the French town of Clermont-Ferrand on Sept. 21, they plastered over street signs along Edouard Michelin Avenue, renaming it Full Employment Avenue. The workers have no quarrel with the tiremaker's founder, for whom the street was named. But they're hopping mad at his grandson and namesake, a quiet, balding 36-year-old who became CEO in June. He has ignited a firestorm by announcing the elimination of 7,500 jobs, 10% of the company's European workforce.

Politicians across the spectrum, from communists to conservative President Jacques Chirac, are also attacking the plan. They're particularly galled that Michelin announced the cuts on the same day that it reported a 20% increase in profits for the first six months of 1999. "We didn't renounce the dictatorship of the proletariat just to replace it with the dictatorship of the shareholders," Socialist Prime Minister Lionel Jospin told reporters in New York on Sept. 20.

PRIORITIES. What has so shocked the French is that Edouard Michelin is shaking up one of the last bastions of old-style French capitalism, a secretive, family-controlled company that has long languished near the bottom of France's CAC 40 stock index. Although firm numbers are unavailable, the family is believed to control 35% of the company. "Too often in the past, we thought that if we made a profit, even if it was only 0.3% of sales,

everything was fine. That's so French!" Michelin told local journalists. Now, he is serving notice that he cares more about productivity than preserving labor peace.

Even if the furor blows over, he has his work cut out for him. In February, Michelin was displaced as the world's biggest tiremaker when U.S.-based Goodyear Tire & Rubber Co. merged with Japan's Sumitomo Rubber Industries Ltd.

Now, the giant is driving straight into Western Europe, which accounts for half of Michelin's sales. Goodyear posted a 5.1% sales increase in Europe during the first six months of the year, while Michelin's European sales were flat. Most of all, Michelin needs to cut costs as auto manufacturers demand ever-deeper discounts from tiremakers.

The company has 127,000 workers,



EDOUARD MICHELIN'S TO-DO LIST

- Slash production costs in Europe while defending market share against tougher competition
- Increase sales in North America and look for an acquisition to establish a beachhead in Asia
- Offer a wider range of brands, especially for hot-selling vehicles such as minivans and SUVs
- Use technical prowess to stay ahead of the pack, as in the 1960s when Michelin developed the first radial tires

DATA BUSINESS WEEK

vs. Goodyear-Sumitomo's 105,000, though its \$14.6 billion in annual sales are \$1 billion less than its rival's.

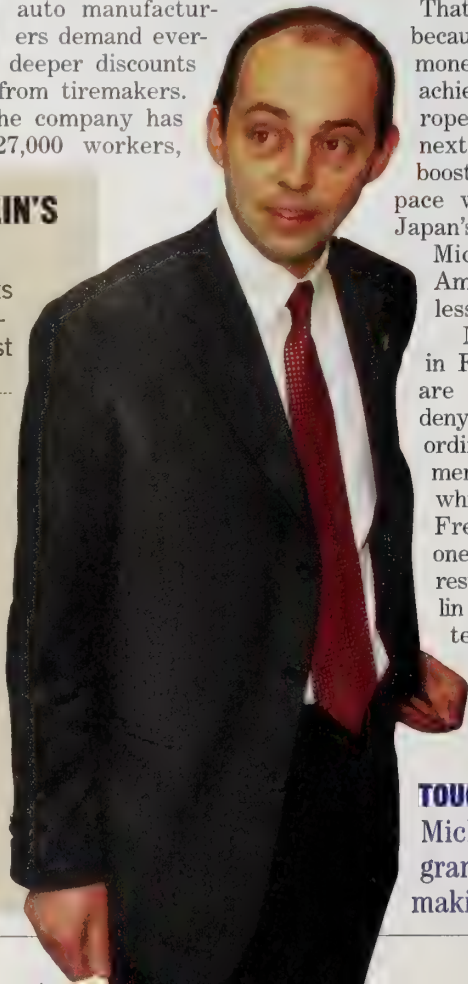
The new CEO has made an encouraging start. To bolster European sales, he is introducing a wider product range, including previously unavailable low-priced brands. He is investing \$400 million to expand manufacturing in the U.S., where sales have grown 4.3% a year, vs. only 2.7% for Goodyear. Labor costs are 20% less than in France.

Industry-watchers have had their eyes on Edouard Michelin since the early 1990s, when he ran the company's truck-tire business in the U.S. He helped oversee the integration of Uniroyal Goodrich Tire Co. after Michelin acquired it in 1990. His mentor was Carlos Ghosn, a tough manager who went on to become a star cost-cutter at Renault and is now restructuring Nissan Motor Co. Already, Michelin has brought in younger faces to replace several senior executives. And in June, he invited industry analysts to a brief and factory tour in Clermont-Ferrand, the first time since 1994 that the company has held such a meeting. Investors are impressed: Michelin's stock is up 35% this year, more than twice the average 15.9% rise on the CAC 40 index.

That's good news for the new CEO because he's going to need to raise money for an acquisition. Even if he achieves his goal of increasing European productivity 20% over the next three years, Michelin needs to boost sales in other markets to keep pace with Goodyear-Sumitomo and Japan's Bridgestone Corp. Although Michelin has 14% of the North American passenger market, it has less than a 5% share in Asia.

Michelin could still face headwinds in France. Socialists in parliament are already pushing legislation to deny the tiremaker state aid it would ordinarily receive for early retirements and worker retraining. Although fewer than 5% of Michelin's French workers took part in the one-day work stoppage, labor unrest could worsen. Edouard Michelin may not win any popularity contests in France these days, but one day he could be remembered as the CEO who saved his grandfather's company.

By Carol Matlack in Paris



TOUGH GUY

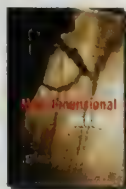
Michelin is shaking up his grandfather's company—and making plenty of enemies



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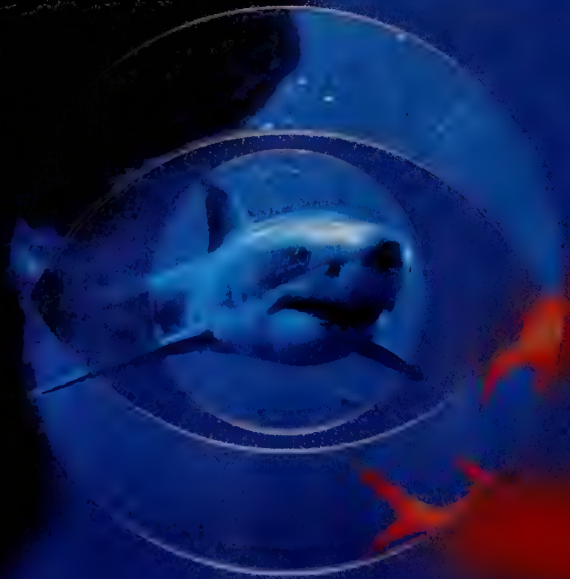


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EDITED BY PATRICIA KRANZ

WHY GERMANY'S OPPOSITION LIKES SCHRODER DOWN—BUT NOT OUT

It's the kind of comeback that politicians the world over dream of. Germany's Christian Democratic Union (CDU) lost its hold on the Chancellor's office to the Social Democratic Party (SPD) barely a year ago. But in recent weeks, the Christian Democrats have won four regional elections in a row against the Social Democrats, dealing a humiliating blow to Chancellor Gerhard Schröder. The victories give the Christian Democrats control of the upper house. How they use their newfound clout will determine the fate of reform in Germany. And if the Christian Democrats play their cards right, they could spearhead a resurgence of the center-right in Europe.

This is a tricky situation. Schröder, defying the left wing of his party, is proposing a tough budget that would cut taxes and spending. But his inability to deliver economic growth thus far has infuriated voters, who have turned to the Christian Democrats in protest. As a result, the CDU now has the power to block or pass Schröder's budget. If the budget passes, it could be the start of serious reform, but the Christian Democrats hardly want to sponsor a Schröder comeback.

Thus the CDU has already rejected the idea of a formal coalition with the Socialists. A coalition would pin some of the blame for the tougher reforms on the CDU, especially efforts to curb health-care spending. "We don't want [a coalition] and we don't need it," says CDU Chairman Wolfgang Schäuble. "Voters have assigned us the role of opposition for four years, and we are fulfilling this task well now."

BALANCE. But the CDU will offer some support to Schröder's program, especially the budget cuts favored by business. Besides, the CDU doesn't want to push Schröder into a corner where he's forced to call an early general election immediately. The party has yet to choose its candidate for the Chancellorship and agree on the main thrust of its next manifesto.

Tensions between Schäuble and other would-be Chancellor such as the more progressive deputy chairman, Volker Rühe, are already evident.

Also angling for power are the CDU's rising stars, who have come to the fore over the past year and who have political ambitions of their own. Among them is Angela Merkel, an East German, who as general secretary of the party has masterminded the string of CDU election victories, and opposition budget spokesman and deputy parliamentary party chief Friedrich Merz, who has proven to be a shrewd and capable opponent of the government's financial policies.

"VIRTUAL COALITION." So CDU leaders say they are willing to negotiate with Schröder to get the policies they like onto the statute books quickly and revise those they don't. Key reforms, such as the budget and tax changes, are likely to get through, but not plans to restrict health-care spending. "What we'll see, in other words, is the emergence of a 'virtual' coalition," says Hans-Olaf Henkel, president of the Federation of German Industry. "It will be a grand coalition of people who support the modernization of Germany, who favor reform. And that would be a very positive development for industry."

Maybe. But how long would such a coalition last? Certainly not until the next election, which is officially due in 2002. The economy is now reviving, and the last thing the CDU wants is for Schröder to get the credit. So the betting in Berlin is that the party will try to sort out its internal problems and engineer the Chancellor's downfall well before then—possibly as early as next May. That's when another election will be held, for the state parliament in North Rhine-Westphalia, Germany's socialist heartland. If Schröder does badly there, the CDU will take off the white gloves.

By David Fairlamb in Frankfurt



SCHAUBLE: No coalition

GLOBAL WRAPUP

AFTERSHOCKS IN TAIWAN

► Assessing the damage from the powerful earthquake that rocked Taiwan on Sept. 21 may take weeks. Early estimates put the cost at \$3 billion as the death toll soared to more than 2,000. The disaster threatens the island's economic recovery, particularly its electronics manufacturers. Before the quake, the economy was expected to grow 5.5% this year.

A prolonged shortage of electricity could disrupt Taiwan's finely tuned supply chain of semiconductors, circuits,

mainboards, and other components that go into computers and electronic goods around the world. The island produces 70% of the world's computer mainboards. Companies at the Hsinchu Science-Based Industrial Park, which are housed in thick-walled, modern buildings and are located north of the quake's epicenter, escaped heavy damage. But they're getting minimal amounts of power—enough to operate lights but not production lines.

The worst hit were the park's 20 semiconductor-fabrication plants, where sensitive processes were dis-

rupted midstream. The shutdown is costing them \$15 million a day. Already, prices for commodity memory chips, which were in short supply, are rising. Prices for 64 megabit memory chips jumped 10.5%, to \$16.57 apiece after the quake.

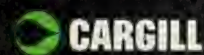
To rebuild, Taiwan's central bank is making \$3 billion available in low-interest loans. And in what many see as a propaganda ploy, even Beijing is offering to help with \$160,000 worth of aid. Taiwan officials thanked China for the offer and said they would think about it.

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ONCE MORE, ALL EYES WERE ON TECH

These stocks again spearheaded much of the BW 50's advance

Build the Internet, and investors will come. That explains Sun Microsystems Inc.'s stunning performance over the past six months: Its stock, which recently split 2-for-1, climbed a lofty 65%. Not content just to sell most of the servers that store and send data, images, and video clips, Sun has been on a tear to expand its reach. Taking a shot at Microsoft Corp.'s Office software, Sun bought Star Division GmbH and is offering its software free from a Web site. Sun also spent \$540 million to grab Forte Software Inc., which specializes in e-commerce software.

No surprise then that CEO Scott G. McNealy boasts that he has "the broadest, most integrated offering there is." And together with solid growth in server sales, the dealmaking is showing up where it counts: Sun's net income jumped 45% last quarter.

That sort of hot hand once again has propelled technology companies to the fore of the stock market—and kept many on this year's crop of BUSINESS WEEK 50 companies surging. In the six months since we ranked Corporate America by selecting the top-performing members of the Standard & Poor's 500-stock index, the BW 50 handily outran the overall S&P 500, 7% to 4.4%.

CYCLICALS' COMEBACK. Getting investors excited about big companies—even the best ones—isn't easy these days, however. The large-cap S&P 500 is treading water because investors increasingly have shifted into long-ignored smaller stocks. That explains why the Russell 2000 benchmark of small stocks was able to top the BW 50, with a 10.7% gain for the period. The 30-stock Dow Jones industrial average also did better than the BW 50, rising 11.7% as beaten-down cyclical companies, such as Aluminum Co. of America, bounced back. (Both Standard & Poor's Corp. and BUSINESS WEEK are owned by The McGraw-Hill Companies.)

Still, for those measuring performance

against the broader big-cap universe tracked by the S&P 500—which remains the key benchmark for many investors and money managers—the BW 50 continued to excel. The companies that made it on to the 1999 BW 50 were selected based on improvements in sales,

earnings, and total return over both one-year and a three-year period. To add additional yardsticks, net margins and return on equity, were used to judge the underlying financial strengths of the companies. Then the companies were weighted by sales, because it's easier to grow from a smaller base.

To check how well these star performers are doing six months later, we figured the group's total stock performance, as if one share of each company had been purchased when the BW 50 rankings were published. Since spring, much of the BW 50's market increase has been powered by high-tech companies selling everything from software to microprocessors to computer services.

Nine of the top 10 companies fall in the tech sector. That includes our No. 1 performer, BMC Software Inc., which racked up an 81% stock price increase over the past six months. In the quarter ended July 30, BMC churned out 43% higher sales of its software, which keeps mainframe computers and their networks operating smoothly. That soaring demand also boosted net earnings 34%.

"SHARPER PENCILS." Like Sun, other hot tech companies have joined the commerce gold rush. The stock price of Oracle Corp., which makes Web-friendly database software, was up 62%. Network systems provider Cisco Systems Inc. rose 37%. And Tellabs Inc. saw its stock gain 31% on surging sales of equipment that transmits data, video, and voice signals. But America Online Inc., the one pure Internet play in the bunch, stalled out. It suffered from Wall Street's tougher, bottom-line examination of Web stocks, even though AOL is one of the few that makes money. Says analyst Christopher P. Dixon of PaineWebber Inc.: "Investors are taking out sharper pencils."

The biggest surprise among the BW 50 winners, however, was found far outside Silicon Valley. AES Corp., the world's biggest independent supplier

THE BUSINESS WEEK

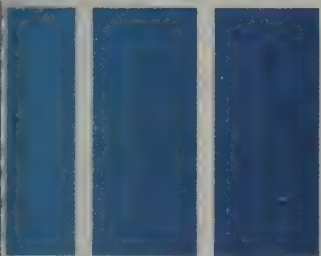


The 10 Best Performers

BUSINESS WEEK 50 RANK	COMPANY	PERCENT CHANGE IN STOCK PRICE 3/12/99 - 9/10/99
22	BMC SOFTWARE	81%
46	AES	77
23	SUN MICROSYSTEMS	65
4	ORACLE	62
32	SOLECTRON	55
24	GATEWAY	51
40	INTEL	48
14	CISCO SYSTEMS	37
6	COMPUWARE	32
11	TELLABS	31

DATA: STANDARD & POOR'S COMPUSTAT,
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electricity, saw its stock shoot up 77%. How did a power company score our second-highest gain? By hustling to take advantage of deregulation. AES is sell-

ing electricity to individual U.S. corporations, and is gobbling up overseas capacity. The company's stock rose 10% in one day, on Aug. 19, when it announced a \$3 billion purchase of England's massive Drax coal-fired plant.

The other low-tech performer was Navistar International Corp., which can keep up with demand from Ford Motor Co. and others for its clean diesel truck engines. Navistar is reaping the benefit of an efficiency drive in the early '90s. Thanks in part to a 56% leap in operating

How the Rest Stacked Up

50

BUSINESS WEEK 50 RANK	COMPANY	PERCENT CHANGE IN STOCK PRICE 3/12/99 - 9/10/99
29	NAVISTAR INTERNATIONAL	24%
5	EMC	21
1	MICROSOFT	19
2	DELL COMPUTER	17
42	BRISTOL-MYERS SQUIBB	17
45	AMGEN	17
17	AIRTOUCH COMMUNICATIONS*	15
49	BELL ATLANTIC	13
30	OMNICOM GROUP	13
44	GENERAL ELECTRIC	11
13	HOME DEPOT	4
27	MBNA	4
36	INTERPUBLIC GROUP	3
47	KOHL'S	3

BUSINESS WEEK 50 RANK	COMPANY	PERCENT CHANGE IN STOCK PRICE 3/12/99 - 9/10/99
7	AMERICA ONLINE	0
34	PAYCHEX	-1
35	WAL-MART STORES	-1
21	MARSH & McLENNAN	-2
28	BELLSOUTH	-5
10	SCHERING-PLOUGH	-8
19	TJX	-8
33	CARNIVAL	-8
8	MORGAN STANLEY DEAN WITTER	-8
20	AMERITECH	-9
18	CHARLES SCHWAB	-10
12	WARNER-LAMBERT	-10
9	SBC COMMUNICATIONS	-10
15	CAPITAL ONE FINANCIAL	-12

BUSINESS WEEK 50 RANK	COMPANY	PERCENT CHANGE IN STOCK PRICE 3/12/99 - 9/10/99
26	FORD MOTOR	-12
39	FREDDIE MAC	-13
41	BB&T	-16
16	MERCK	-17
43	DAYTON HUDSON	-18
3	GAP	-19
25	ELI LILLY	-24
38	MAYTAG	-24
31	SAFEWAY	-24
37	LOWE'S	-28
48	WASHINGTON MUTUAL	-28
50	STATE STREET	-29

*AirTouch Communications merged with Vodafone Group on June 30. The increase is based on the June 29 closing price.
DATA: STANDARD & POOR'S COMPUSTAT



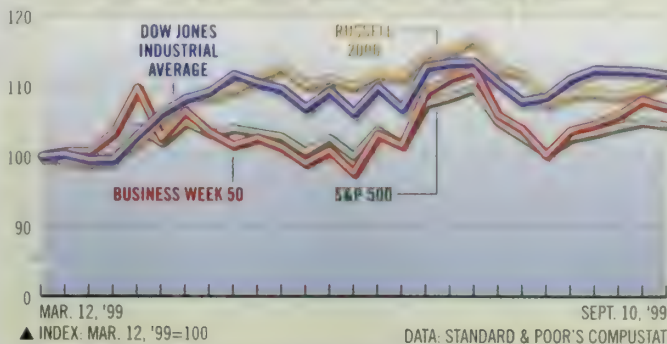
arnings for the quarter ended July 31, Navistar's stock rose 24%.

Not all the BW 50 companies proved so nimble at adapting to roiled markets. Pharmaceutical stocks were battered by talk that Congress might give drug benefits to the elderly via Medicare. Investors fear that the government becomes huge buyer of drugs, companies will feel pricing pressure. Also, several companies increased competition as their blockbuster drugs lose patent protection. That's why Lilly & Co. suffered a 24% drop in its shares, while Merck & Co. lost 17%.

WIDE WORRIES. Rising interest rates are what ails most of the beleaguered members of this year's BW 50. Those higher rates could spark a slowdown, which could hit retailers and big consumer-products companies. Indeed, jittery investors are taking profits and shifting their money elsewhere. Despite strong results—sales climbed 29% in the most recent quarter, with net earnings up 12%—Gap Inc.'s shares fell 19%. The worry: All the action is in Gap's Banana Republic and Old Navy offshoots, while Gap store sales are flat.

THE BUSINESS WEEK 50—SIX MONTHS LATER

Our corporate stars edged out the S&P 500 but came up a bit short against other popular indexes



Maker of big-ticket consumer goods were hit hard, too. Ford, the only carmaker on our list, is facing more competition on its highly profitable trucks. Its net earnings slumped 2% in the most recent quarter, and its stock fell 12% over six months. Maytag Corp., meanwhile, may have set a record for the BW 50's most precipitous fall. In early September, the fast-growing appliance maker shocked Wall Street with projections that sales will stall out for the rest of this year. Turns out Maytag has fallen behind in discount appliances. Its stock price, which had been up 18% at the time, got hammered and finished down 24% for

the six month period. As investors shifted money out of stocks and into bonds and other investments, some financial-services companies also got walloped. State Street Corp., which provides back-office services for institutional investors, earned the dubious honor of last place on the list, off 29%. Its latest quarterly results showed only an 8% net income gain as mutual-fund inflows fell off.

For many of the BW 50, the next six months won't be much easier. This may be the year Santa Claus relocates permanently to the Internet, challenging traditional retailers like never before. And who knows what impact Y2K will have on computers or consumers? But robust overall earnings projections suggest that there is still growth to be squeezed out of this long-running expansion. "With worries moderating," says Hugh Johnson, First Albany Corp.'s chief investment officer, "quality large-cap stocks are the place to go." And that's what the BW 50 is all about.

By Larry Light in New York, with Peter Burrows in San Mateo, Calif., and bureau reports

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the internet age

70th Anniversary
BusinessWeek



BUSINESS

E ECONOMY

THE WORLD'S NEXT GROWTH ENGINE

America blazed the trail, and now the rest of the globe can enjoy gains from an information economy

STRATEGIES

BRIGHT HOPES AND TERRIBLE FEARS

Much of what we thought we knew about business won't hold water when it comes to the Internet

MANUFACTURING

THE CUSTOMER TAKES CENTER STAGE

Personalized products become viable as the Net provides direct links between client and supplier

MANAGEMENT

WANTED: THE YOUNG AND GIFTED

For companies on the cusp of the Internet Age, the resource in shortest supply is brainpower

FINANCE

ALL THE WORLD'S AN AUCTION

Where has telecom and information technology had a greater impact than on capital markets

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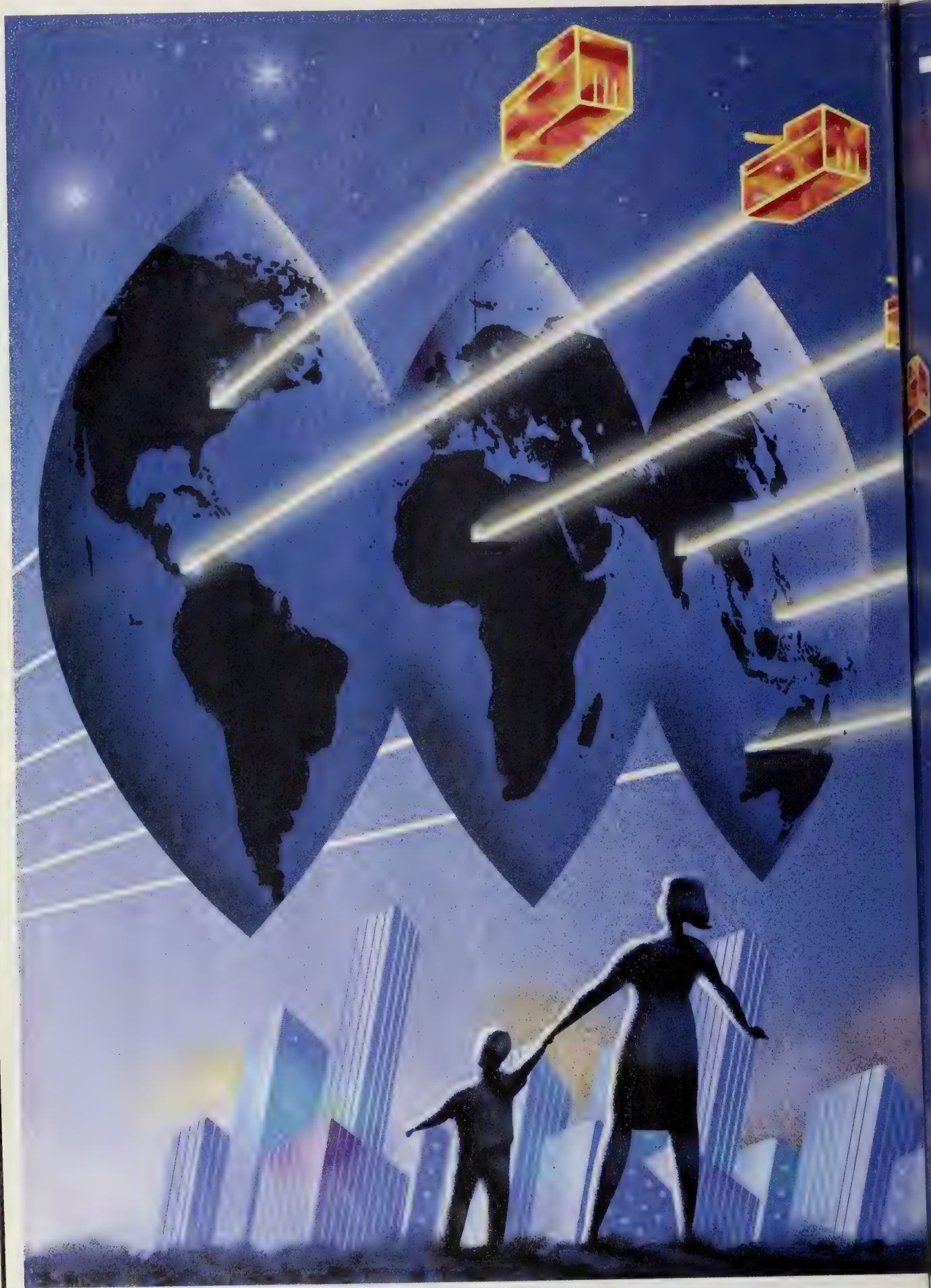
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The Internet AGE

The power to navigate the world
at the click of a mouse is a force
 that is transforming our
lives like none before

In October, 1969, researchers at the University of California at Los Angeles were ready for a critical experiment. They had set up a computer and communications node while colleagues installed similar equipment in Menlo Park, Calif. Now they would test whether they could link computers over telephone lines to operate as one system. Once the line between the two teams was open, the researchers at UCLA began slowly tapping out a message, "login," to activate the link. The system crashed.

Such was the genesis of the Internet Age. By the end of the month, the teams linked the computers in a demonstration that captivated their bankrollers at the Pentagon. The brass hats would eventually create a nationwide ring of computers and telephone lines designed to keep functioning even if a nuclear attack took out part of the network. That idea, jazzed up with software that makes information easy to read and lets us navigate the Net with a mouse click, has become the force that is transforming our lives like none before.

HUMBLLED. Anyone with a computer is a citizen of the world—and a richer world at that. The musings of Leonardo da Vinci, your granddaughter's refrigerator-door art, a Presidential news conference, or a list of your supplier's inventory of a critical component are within reach. At this point, we can only imagine where the technology will lead us.

Certainly the early impact of the Internet is profound, particularly for business. Upstarts with a T1 line and buckets of cash are humbling companies that once seemed impregnable. Financial markets are becoming more efficient for people who want to invest or raise money.

In fact, efficiency may be the watchword of the Net. It provides the means to break down bureaucracies; challenge corporate, governmental, and intellectual orthodoxies; and foster a stronger sense of community. Such developments have sparked more than one revolution. There's no reason to expect anything less this time.

The Internet Economy: the World's Next Growth Engine

THE U.S. BOOM IS ONLY THE START OF A GLOBAL SURGE • BY MICHAEL J. MANDEL

Starting with the Middle Ages, the story of the human race has been marked by accelerating economic growth. In the 1400s, global per capita income rose at only 0.1% per year, estimates economist J. Bradford DeLong

of the University of California at Berkeley. Over the next five centuries, that rate moved steadily upward, finally hitting nearly 3% in the second half of the 20th century. Now, it looks as though the global growth rate may be on the verge of ratcheting up again.

Why? We have entered the Age of the Internet, a globe-spanning technology that has taken hold amazingly quickly. Just as data flows across the Net in easily digestible packets, knowledge, in the broadest sense, can now be easily tapped and exchanged by people in every corner of the earth. The result: an explosion of economic and productivity growth—first in the U.S., with the rest of the world soon to follow.

The dynamics of global growth are changing at least as profoundly as they did with the advent of railroads or electricity. The evolution of the Internet as a pervasive phenomenon means that the traditional factors of production—capital and skilled labor—are no longer the main determinants of the power of an economy. Now, economic potential is increasingly linked to the ability to control and manipulate information.

The initial manifestation of the new era is the stunning performance of the U.S. economy in the 1990s. For most of the postwar era, Western Europe and Japan slowly gained ground on the U.S. by adopting U.S. technology and adding their own innovations. In 1970, U.S. per capita income was 31% higher than that of other major industrialized countries. By 1991, the difference had narrowed to only 10%.

But with the dawn of the Internet Age, the gap has start-

the
internet age

ed to widen again, to more than 22% this year. "This is historically unique," says Luc Soete, an economist at Maastricht University in the Netherlands and Europe's leading expert on the New Economy. "For the first time in the postwar period, you have growth divergence—the pulling away of the leading technology country."

The acceleration of U.S. growth is only the opening act of a much larger drama of global economic change—and growth. For starters, the Internet should make many more industries open to globalization. Historically, international trade flows have consisted mainly of goods. Whether it was spices or airplanes, it was far easier to ship goods overseas than services. But with the Internet, it becomes much easier to provide services of all types—banking, education, consulting, retailing, gambling—through a Web site that is globally accessible. "The Internet is the backbone of greater service trade," says Joseph Quinlan, senior international economist at Morgan Stanley Dean Witter.

Beyond that, as more and more countries become tied into the global Net, there may well be an acceleration of the rate of innovation. New growth theory predicts that as the size of the global market gets bigger, the rewards for uncovering lucrative new ideas get bigger and bigger. Moreover, as new ideas flow back and forth across national boundaries faster and more easily, everybody will benefit. "There are lots of reasons to think the Internet will lead to much more rapid diffusion of knowledge," says Jonathan Eaton, an economist at Boston University. A study by Eaton and his co-au-

CONNECTING, THEN AND NOW Trains made it easier to move goods. Fiber-optic cable makes it easier to move information





hor, Samuel Kortum, has estimated that in the extreme case, if national borders became irrelevant, global growth could go up by one full percentage point.

To be sure, the global economy has not yet reached that point. The U.S. still dominates the Internet, accounting for more than half of individuals online and three-quarters of Internet commerce. With only a few exceptions, most other countries have less than one-quarter of their people online, which appears to be the level at which the U.S. took off. Moreover, most industrialized countries are not yet seeing rapid accelerations in information-technology spending.

Even as the size of the global pie increases, there is the question of who will get the biggest share of the benefits. Periods of great technological ferment often see new countries or regions become pacesetters for the global economy. The second Industrial Revolution of the late 1800s and early 1900s saw the U.S. supplant Britain as the major industrial power, in part because the U.S. adopted new innovations faster.

The Internet makes innovation even more important. With new ideas diffusing quickly, there is little chance of protecting a monopoly. Nor are small differences in production cost as important when the technology is quickly evolving. Instead, whichever country is able to generate and make use of innovations the fastest will come out ahead.

It is possible to overemphasize the differences between the Information Revolution and earlier technological breakthroughs. In the second half of the 1800s, the combination of railroads and the telegraph greatly reduced the cost of over-

land freight transportation and sped up the rate at which new ideas could diffuse across the industrializing world. The widespread use of telephones and air travel in the 20th century increased the rate of technology diffusion even more. And as the size of markets increased, so did the potential rewards for new ideas.

Yet there were still enormous impediments to the free flow of information, especially across national borders. An economic study done in the 1980s found that it still took upwards of 10 years for an important innovation made in one country to be adopted elsewhere. That's about how long it took American auto makers to adopt Japanese manufacturing methods after Japanese cars took a large share of the U.S. market in the early 1980s.

BUSINESS-TO-BUSINESS BOOST. Now, the global economy has speeded up to Internet time. A computer manufacturer running low on chips can have a new batch delivered from half a world away without lifting a finger because a supplier's computers detected the shortage automatically. A new bit of audio software can propagate by the millions in a week. Knowledge of every sort becomes available and useful much sooner. By itself, that increases the pace of global growth and boosts efficiency. A recent study from Giga Information Group Inc. argues that the cost savings globally through business use of e-commerce will rise from \$17 billion in 1998 to \$1.25 trillion in 2002, with U.S. companies reaping half the long-term benefits.

In addition to spreading innovations and cutting costs,

A Thumbnail History of Disruptive Technologies

Horse-drawn carriages seem romantic today, but the industry virtually disappeared within a decade after the introduction of the Model T in 1908. Radio didn't die when television came along, but our grandparents would hardly recognize how we use it today. When a technology comes along that seems to change everything, the ultimate implications are not always readily apparent.

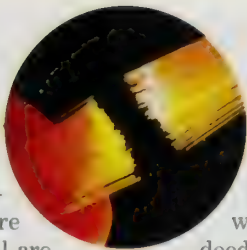
Railroads

Railroads enabled manufacturers, merchants, and farmers to sell to far bigger markets than ever before. The expanded markets and more efficient transportation in bulk made possible all sorts of other innovations, such as large-scale assembly lines.



Telephone

It was perhaps the greatest breakthrough in information technology ever. Large-scale, centrally managed corporations—such as General Motors—would have been impossible without it.



Internet may also boost world trade. One reason is better information. Despite the global nature of the economy, most consumers and businesses still are much better informed on the products available in their own country. As a result, many potentially useful trades go unmade.

The Internet changes all that. Suddenly, it is possible to get better or cheaper products to compete in a global market, especially if the products have relatively low shipping costs. "The amount that you have to be better than the other guy will shrink," says Gene Grossman, an economist at Princeton University. Fromages.com, the French-based gourmet cheese site, gets about 55% of its business from the U.S. On the eBay Inc. consumer auction site, someone putting an item up for a bid can just as easily find a buyer in Europe or Latin America as in the U.S. Indeed, eBay offers detailed directions on how to ship auction goods internationally.

For businesses, the Internet also makes it much easier to reach beyond the home country to find the best suppliers. Usually, companies have always relied on foreign sources for cheap parts and assembly. But now, it has become possible to integrate foreign companies more closely into the supply chain, boosting savings and speeding up innovation.

Beyond that, the Internet could turn large portions of the service sector into export industries. Higher education is one clear opportunity. American universities and colleges are well known to be the best in the world, but until recently,

the only way for them to "export" their wares was to have foreign students come to the U.S. Indeed, such students added almost \$9 billion to U.S. exports in 1998.

The Internet brings education to the students. Europe is way behind in higher education, and the gap is widening as European universities have trouble adjusting to the rapid pace of change. "You have complete rigidity here," notes Soete. "The courses are not being updated."

Financial services is another prime candidate for export. In Japan, the deregulation of stock transaction fees in October will trigger a tidal wave of online brokerages. That includes U.S. operators such as E*Trade and Charles Schwab & Co., which are setting up Internet-based operations in hopes of tapping into a potentially huge market.

HOW JARRING THE SHIFT? Although increased trade and faster diffusion of information lets companies and countries play on a larger field, the laws of comparative advantage between countries have not been repealed. The U.S. starts with two big advantages: It was first, and it has the biggest home market. How those two advantages play out will determine how jarring the impact of the Internet is.

The advantage of being first will ebb away over time. The U.S. lead in Internet penetration is already being eaten away, especially in Europe. Jupiter Communications Inc. predicts that the number of online households in Europe will triple over the next five years. In the Asian Pacific, the number of people who regularly use the Internet is antici-



Internal combustion engine

The automotive and truck industry fueled the boom of the 1920s and breathed new life into the petroleum, rubber, glass, and highway-construction industries. It also enabled employers to draw on a much larger pool of workers.

Electric Power

Electric power is the classic example of an "enabling technology," also called a "general purpose" technology. By bringing power to any point, it makes every part of the economy more efficient.



America has the biggest home market, but Iceland, Finland, and Sweden already have more Net usage per capita

pated to at least double over the next two years, fueled by growth in China and Japan.

The number of non-U.S. companies using the Internet to do business is rising fast as well. In Japan, "there will be two waves—business to consumer and business to business," says George Makhoul, a partner at Price Waterhouse Consultants Co. in Tokyo. "In business to business, it's definitely starting." According to a recent joint study by Japan's Ministry of International Trade & Industry (MITI) and Andersen Consulting, business to business accounted for nearly all of the \$79 billion in e-commerce in Japan in 1998.

CATCHING UP QUICKLY. What's more, the rapid diffusion of ideas in the Internet Age is helping European and, to some degree, Asian companies learn from what American companies have done. "European businesses were slower to move to the Net," says Suzan Nolan, president of Paris-based Blue Sky Inc., a Web marketing and research company. "But that lets them accelerate along the learning curve." The Europeans have caught up remarkably quickly in online banking. Last November, there were 878 bank sites in Europe. By June, that number had more than doubled, with two-thirds of them allowing online transactions.

The gains are especially apparent in a few Internet-savvy countries, especially Scandinavia and Britain. Already, Iceland, Finland, and Sweden have more Internet usage per capita than the U.S. And over the past three years, infor-

mation-technology spending as a share of gross domestic product has risen by one-third in Britain. "We've got boom going," says Roger Baker of Roger Baker & Partners, a British recruiting firm focusing on information-technology consulting jobs. "If you go back 12 months, you could see it coming."

Despite the fact that the Internet makes national boundaries more porous, the U.S.'s edge in the size of its home market is not so easily overcome. One example: Gateway Group Inc. estimates that the average cost of developing and launching an e-commerce site is \$1 million, mostly for labor. That's true whether the site is for the U.S. or France. The market is far more attractive for U.S. companies—especially ones—to go on the Web. "The size of the American market is one of the most important advantages U.S. companies have," says Johan Staël von Holstein, a board member and business coordinator at Stockholm-based Icon Medialab International, a Web consulting company with 600 employees in 12 countries.

It isn't just a matter of being able to amortize costs over a larger base. In a rapidly changing market, it helps to be able to try a lot of new things rapidly. "The advantage America has is that it is a large laboratory," says Nolan. "You can cycle through experiments quickly, make mistakes quickly, and recover."

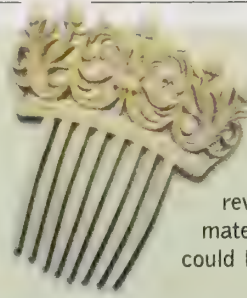
Radio, Television & Movies

Mass communication brought large economies of scale to entertainment and information. These technologies created industries that had no predecessors.



Jet Travel

Like railroads, jet travel dramatically increased the span of markets that companies could sell to. And like the telephone, the rapid speed of jet travel made it easier to control multinational corporations from one headquarters.



Plastics

This was the dawn of the materials revolution. The ability to make new materials to order greatly expanded what could be done in terms of manufacturing.

Microelectronics

The invention of the transistor and then the integrated circuit made information processing far cheaper and faster than ever before. The eventual result: the Internet Age.



Outposts on the Net

Projected number of regular Internet users by yearend 2000

	MILLIONS OF PEOPLE	PER 1,000 PEOPLE
NORTH AMERICA	148.7	479.1
WESTERN EUROPE	86.6	217.5
ASIA-PACIFIC	57.6	16.6
SOUTH/CENTRAL AMERICA	10.8	21.1
EASTERN EUROPE	9.5	32.7
MIDDLE EAST/AFRICA	7.5	7.2

DATA: COMPUTER INDUSTRY ALMANAC

common market in Europe helps, because of the multitude of languages and cultural differences, the Continent cannot compare with the relatively homogeneous American market. However, it is possible that the introduction of the euro actually diverted attention from the ongoing Internet Revolution. "The Internet is making the world global," says Soete. "But we made more European."

It doesn't help that local phone calls are still charged by the minute in most European countries, discouraging extensive use of the Internet. And while venture-capital funding for entrepreneurs is finally picking up in Europe, its availability is still far less than in the U.S., depriving Europe of one of the key growth engines for the Internet Age.

But there are some impediments to the Net achieving its full global potential. A technological restart and a big home market will still help U.S. companies. David Roddy, an economist at PricewaterhouseCoopers & Touche Consulting, argues that the high valuations of many U.S. stocks—particularly in the technology sector—make sense only if investors are assuming that a huge export surge is coming. "The true gains are going to come from being able to be a net exporter," says Roddy. Meanwhile, for a variety of cultural, legal, and linguistic reasons, even powerful American companies will have a tough time establishing dominant positions in Europe and Asia. "It's not going to be that easy for one to roll in and beat the other," says von Holstein.

SNAGS. For one thing, consumers in each country will have definite preferences about the look and feel of Web sites. Nolan notes that, to many Europeans, American sites come off as having too many bells and whistles. European sites are more consumer-oriented. Or it can be something as simple as cultural differences: In America, red is the color of love, but in Spain, it is associated with socialism.

More to the point, even in the era of branding, the best marketing is still done locally, in the language of the customer. And once a Web site has to be re-created in a different language, much of the scale advantages disappear. Indeed, European companies that learn how to deal with the Continent's language and cultural barriers may find that gives them a competitive edge.

Asia lags behind Europe, but with its enormous market, it may have a better chance of thriving

in the Internet Age. The key nations are China and Japan. China has more than 4 million Internet users, but that number is expected to jump to 27 million by 2001.

Japan, despite its advanced technology and global business skills, has some catching up to do. Only about 17 million Japanese, or 13% of the population, used the Internet as of March, 1999. It's still tough for startups to find scarce capital, but the most promising engineers continue to stick to safe jobs, and Internet infrastructure remains weak. Hitoshi Shin, a senior high-tech analyst at Merrill Lynch & Co. in Tokyo, explains: "If all of a sudden we began using the Internet like it is in the U.S., the system would explode because it wouldn't be able to handle all the data."

There are signs of gains. Domestic shipments of home-use PCs grew by more than 80% in the April-June quarter as consumers jumped on the Web. And business investment is expected to boost Japan's information-technology services market by 26% over the next five years. "From there, it will start feeding on itself, as it did in the U.S.," says Makhoul.

Softbank Corp. founder Masayoshi Son is showing the way. He is creating a financial *keiretsu* on the Japanese Internet by setting up E*Trade Japan, Morningstar Japan for stock quotations, and other financial consumer services. He wants to create a Japanese arm of the U.S. Nasdaq stock market for businesses unable to meet the stringent requirements for initial public offerings on existing markets.

Indeed, the real key to the next stage of the Internet Age will be whether financial innovation diffuses as fast as technological innovation (page 120). Despite the apparent globalization of financial markets, the differences between countries has so far turned out to be important. The U.S. financial sector was ready to invest in new knowledge-based companies via venture capitalists and IPOs. But in Japan and Europe, banks and other financial institutions remained heavily tied into the old industrial companies.

If these differences persist, the locus of innovation will remain in the U.S., no matter how many Web sites are set up in Europe and Asia. So even if the rest of the world catches up in e-commerce, the U.S. may have already gone on to break new ground in something else. But if the financial-innovation machine of the U.S. spreads overseas, ideas will come fast and furious from everywhere. Then, the Internet Age will truly be an era of global growth.

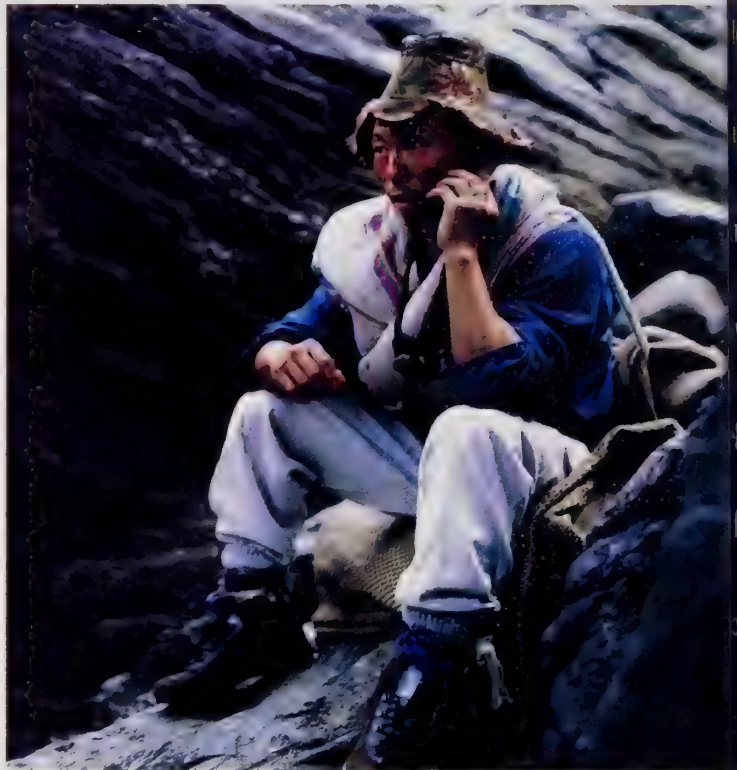
With Irene M. Kunii in Tokyo

FAST FORWARD

In **2003**, the U.S. will account for roughly **50%** of Internet-based commerce, compared with **75%** in 1998

INTERNATIONAL DATA CORP.

dreams made real.



oney, you're gonna hate me, but I gotta work
te. It took one hundred years to connect the
rst billion people. The second will take only
ve. The wireless revolution is at hand. And
gilent is testing and creating components for all
fit. From handsets to networks, we're helping
bring wireless to the world. And making sure
works. Even if that means overtime.



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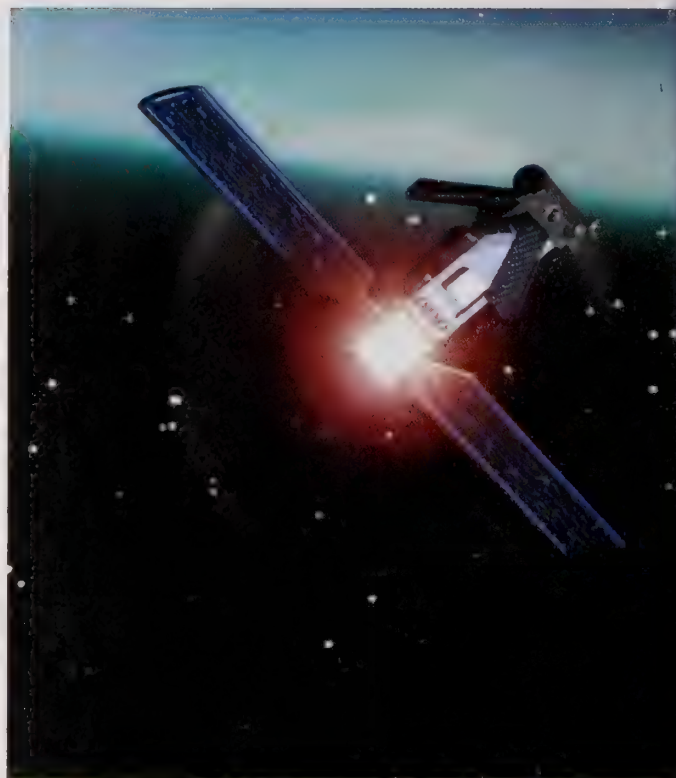
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A New Era of Bright Hopes and Terrible Fears

COMPANIES THAT CAN "BLAST YOU OUT OF YOUR PLACE" AROUND • BY ROBERT D. HO

When we try to comprehend something as vast, amorphous, and downright scary as the Internet, it's no wonder we grope for familiar historical precedents—the railroads, the interstate highway system

the telephone network. But none of those really captures the Internet's earthshaking impact on the business world. For that, we must take the advice of Internet commerce pioneer Jeffrey P. Bezos, chief executive of Web superstore Amazon.com Inc., and go much further back in time.

In the Cambrian period, 550 million years ago, something snapped. In the space of less than 10 million years—a geologic instant—there was an explosion of multicelled organisms. Strange new life forms appeared, some with teeth and claws: the world's first predators. These species were so varied and numerous that their basic makeup underlies nearly all life today. Says Bezos: "Evolution tried every conceivable path—really fast."

TUMULT AND CONFUSION. That burst of new life both wondrous and dangerous is precisely what's happening in business today. Out of this primordial technological swamp called the Internet are emerging new companies, business models, corporate structures—even new industries. It's a time of such tumult and confusion that no one can agree on what's happening now, much less on what's coming next. In the five years since the World Wide Web made the Internet usable by mere mortals, everything we thought we knew about business seems questionable.

Just two years ago, for instance, Yahoo! Inc. was still a Web search index with a silly name, founded by two grad school dropouts. Since then, it has evolved into a major media company that commands a \$40 billion market capitalization—more than Viacom Inc. just paid for CBS Corp. Money-losing startups such as Amazon.com and eToys Inc. command multi-

the
internet
age

billion-dollar market caps and make chumps out of corporations with multibillion-dollar revenues, such as Barnes & Noble Inc. and Toys 'R' Us Inc. Executives at venerable manufacturing powerhouse Hewlett-Packard Co. talk of giving away multimillion-dollar computers for a cut of customers' e-revenues. And unknown upstarts with headscratching labels such as vertice portals, infomediaries, and e-markets threaten to hijack the leadership of countless industries, from plastics to financial services.

Some of these new corporate creatures, for all we know, are barreling down an evolutionary dead end. But the most innovative are likely to prove the commercial equivalent of mammals, which started out small and rodentlike but proved swift and highly adaptable. "They can blast you out of what you thought was your place," frets J. Daniel Nordstrom, CEO of Nordstrom.com. "You can never assume you own your marketplace on the Net."

Consider how the Net differs from microprocessors or other disruptive technologies that have gone before. It's a ready-made marketplace—essentially \$1 trillion worth of network connections, computer power, and limitless databases full of information. And it's available largely free to anyone with a phone line and a personal computer. Anywhere in the world. Anytime, day or night. In short, the Net offers an entry point to all comers in every market and industry.

Understandably, all this flummoxes traditional executives who have spent their working lives building companies with real assets, real factories, and real profits. "I don't understand the valuations," Wal-Mart Stores Inc. CEO David D. Glass



growls of the online upstarts. And Ford Motor Co. CEO Jacques A. Nasser, while admiring Bezos' passion, admitted his befuddlement about Amazon's strategy when he talked e-business to a group of Ford executives in June. "His business model boils down to 'Buy at 100 and sell at 80,'" he quipped, drawing peals of laughter. "If you heard it, you would sell tomorrow."

PERILS. But Nasser knows the Net is no laughing matter. The Center for Research in Electronic Commerce at the University of Texas figures the Internet economy already amounts to \$301 billion if you include online sales of industrial and consumer goods and services as well as the equipment and software to support e-commerce. That's not far short of the \$350 billion auto industry. With growth like that in just five years, the commerce on the Net will be as perilous for many businesses—and entire industries—as it is profitable for others. A half-dozen, from financial services to utilities, will feel the strongest early shock waves. There's hardly an industry that isn't undergoing an upheaval in how it deals with customers and partners, organizes itself, or defines its essential purpose. Says Mark T. Hogan, group vice-president of General Motors Corp.'s e-GM Internet unit: "We've come to realize that if we don't move with Internet speed, we could become extinct."

All of these consequences flow from one inescapable fact: The Internet puts the customer in charge as never before (Manufacturing, page 103). Until the Net, buyers faced huge obstacles to extracting the best prices and service. Research was time-consuming, and everyone from producer to retailer guarded information like the crown jewels—which it was. Notes Gary Hamel, chairman of the man-



NET IMPACT

Six industries that are getting hit the hardest

Computing and Electronics

E-business 1999: \$52.8 billion

E-business in 2003: \$410.3 billion

Percentage of total in 2003: 37%

No surprise here: As the backbone of the Internet, the computer industry is the most aggressive in applying it to its own business. Together, Dell Computer, Cisco Systems, and Intel sell more than \$100 million a day over the Net. For most makers of PCs, however, the Net still presents a big challenge: cede online sales to direct sellers Dell and Gateway, or risk alienating their retailers? The Internet may yet provide computer makers with new business. Dell and Gateway sell Internet service, and other PC makers hope to get a cut of online purchases by their customers. Hewlett-Packard even plans to give away large server computers for a cut of e-revenues.

DATA FOR ALL SNAPSHOTS: FORRESTER RESEARCH, BUSINESS WEEK

agement consultancy Strategos and a Harvard business school research fellow: "For many companies, customer ignorance was a profit center."

Enlightenment sets a new chain of events in motion. Now buyers can find on the Net a wealth of in-

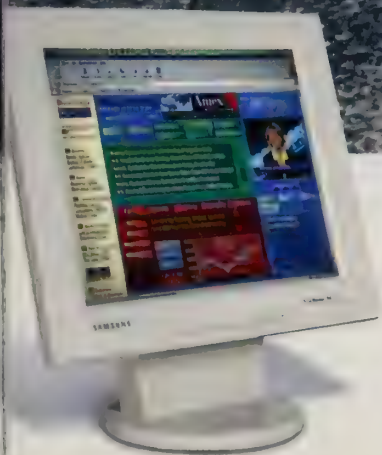
FAST FORWARD

Companies did **\$43 billion** in business with each other over the Internet last year. By **2003**, it will rise to **\$1.3 trillion**, accounting for **9.4%** of total business-to-business sales.

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Robot shoppers may soon crawl the net, authorized to make purchases if they find the right price and features

formation on just about any product or service. And if they don't like what they see from one company, another—or three dozen others—are only a click away. But while buyers have a stick, sellers have a carrot. On the Net, sellers can identify individual buyers and collect an unprecedented amount of information on their purchase patterns. Already, software programs can analyze this data along with that of other customers and suggest a book or music CD that a customer might also like—with surprising success.

Ultimately, the Net may usher in products that have been customized for each and every customer. San Francisco-based startup planet U, for instance, is using the Net to help packaged-good companies and supermarket chains target their coupons to individual shoppers. Using loyalty cards to track purchases, supermarkets send the information over the Net to a printer, and a unique package of coupons is mailed out to each customer. Even the amount of discounts on each product can be varied according to how much customers usually buy. Although the coupons cost two to four times as much to print, customers try the products as many as 10 times more often.

PENNIES COUNT. For most sellers, buyer power is likely to present a lot more challenges than opportunities. Nowhere is this more apparent than in the exploding number of sites where auction fever has taken hold. On eBay Inc.'s online trading community and other consumer sites, auctions are as much a form of entertainment as anything. But on sites such as FreeMarkets On-Line Inc. and e-STEEL Inc., where buyers bid on tons of coal and metal, a penny here and a penny there is about corporate survival. Increasingly on the Net, list prices are nothing more than the starting point for negotiation.

Why? The computing power of the Net allows prices to be negotiated instantly and mechanically, making haggling more cost-effective than ever. So for the first time since fixed prices became the norm a century or so ago, a raft of dynamic pricing methods—from auctions to buyer cooperatives and even barter sites—is gaining much wider currency than in the physical world. With the help of eBay, some 15% of consumer e-commerce,

or about \$1.4 billion, went through auctions in 1998, according to market watcher Gomez Advisors.

Traditionally, auctions aren't done for the benefit of buyers. Sellers realize that by gathering as many buyers as possible in one place, they can provoke heated bidding and thus drive up prices. These days, though, a number of new companies are reversing the auction process in favor of the buyer. Proline.com Inc., for instance, lets buyers trade away convenience—exact departure times for flights—in return for a lower price than airlines would ever offer at retail. Going a step further, startups such as Accompany Inc. and Mercata Inc. pool groups of buyers so that the more people who agree to buy a product, the lower the price goes.

Even those methods look clumsy compared with what's coming. Some experts believe that software such as "bots," automated shopping agents, will soon proliferate on the Net. Not only will these software robots search out deals on behalf

NET IMPACT

Telecommunications*

E-business 1999: \$1.5 billion

E-business in 2003: \$15 billion

Percentage of total in 2003: 5%



With the Internet kicking data traffic into high gear, it should be high times for just about everyone in the business. And indeed, revenues from telecom services to businesses are booming for global leaders such as AT&T and MCI WorldCom, even as Net-based upstarts such as Qwest Communications International put pressure on rates. Actual revenues, however, won't be a large portion of the total for some years to come.

Why? Large clients require lengthy consultation on data services. And current telecom sales reps will resist getting bypassed.

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of buyers, they will be authorized to make purchases automatically if they find the right combination of price and features. In five years or so, your phone might instantly sort through rates as you place a call, choosing the lowest rate on the fly.

Gearing up to serve this newly empowered customer turns the classic business model on its head. Suddenly, factories, trucks, salespeople, and other assets that once defined most companies' competitive edges become a liability. Through the Internet, virtual upstarts can reach customers faster for a small fraction of the cost of stores and salespeople. In many industries, investors clearly view traditional factories and stores much the same way they view deregulated utilities' outdated power plants: near-worthless stranded assets. On the Net, speed trumps mass almost every time.

To see why, do the math on Amazon.com vs. Barnes & Noble. Sure, Amazon is spending into the red to grab customers. But it still holds a formidable inherent cost edge over a rival such as Barnes & Noble. It's currently posting an annual sales rate of \$1.2 billion, equal to about 235 Barnes & Noble superstores. But because of the incredible efficiencies of selling over the Web, Amazon has spent only \$56 million on fixed assets such as computers and warehouses, while B&N has spent \$472 million on its 1,000 or so stores. Moreover, Amazon's investment in new warehouses can support \$15 billion in sales, estimates Thomas Weisel Partners analyst Christopher Vroom.

That's why its \$21.2 billion market capitalization

NET IMPACT

Retailing

E-business 1999: \$18.2 billion
E-business in 2003: \$108 billion
Percentage of total in 2003: 6%

Naysayers focus on Amazon.com's growing red ink, but retailers know that any company growing to \$1.4 billion in sales in four years is a threat. And there are hundreds of other click-and-order upstarts with a



NET IMPACT

Financial Services*

E-business 1999: \$14 billion
E-business in 2003: \$80 billion
Percentage of total in 2003: 6%

Financial services are a natural for the Net—easily digitized and delivered online. And cheap: It costs banks only a penny to process a Net-based transaction, compared with \$1.07 for a branch and 27¢ for an ATM.

But while the growth of online financial services to businesses is growing fast, it's hampered by complex regulations and security concerns still being worked out. Also looming ahead: Software companies such as Microsoft and Intuit can expand their financial programs into commercial banking services.

*BUSINESS ONLY

crushes B&N's \$1.8 billion valuation. No wonder retailers both real and virtual, worry about "getting Amazoned." Warns Cisco CEO John T. Chambers: "Amazon vs. Barnes Noble will happen in every industry."

This wrenching revelation is forcing a fundamental thinking of what a company does. Increasingly, savvy companies avoid building expensive, time-consuming in-house capabilities. Instead, they form partnerships that coalesce and dissolve for each new project—a process research firm Forrester Research Inc. calls "dynar trade." Many companies are even allowing customers and partners access to their innermost operations, blurring the lines between corporations.

No company has gone further down this road



jump on brick-and-mortar rivals.

Facing a blockbuster e-Christmas in 1999, however, retailers are getting with the program. Some, such as Barnes & Noble, have spun off dot.com companies to tap online capital, while others, like Sears, are capitalizing on dominance in segments like appliances. But they also have to watch their back as manufacturers such as Sony start to sell direct.

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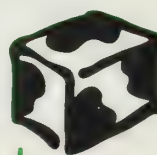
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Where auction fever has taken hold, buyer power will present sellers with more problems than opportunities

than networking equipment giant Cisco Systems Inc. It handles 78% of all its orders over the Net and never even touches half, or \$4 billion, of them. Cisco develops product, manufacturing, and testing specifications, but by using the Internet, the orders shoot directly to contract manufacturers. Cisco owns only 2 of 30 plants producing its network switches and routers.

The unprecedented flexibility the Net provides to tap resources outside the company is forcing many to rethink their very *raison d'être*. What are we better at than anybody else? If we aren't the best at shipping, won't a rival who uses the best shipper gain an edge over us? Some experts predict a round of corporate divestitures as companies answer the questions. "Honey, I shrunk the company" is what the CEOs will do," says Kirk Klasson, director of strategic solutions for consultant Cambridge Technology Partners.

Then comes the task of applying a little imagination to what's left. Even the most heavyweight manufacturers, for instance, may be able to reinvent themselves as service providers instead of box pushers. Hewlett-Packard hopes to use the Net to remake itself from a computer manufacturer into an "e-services" company. Instead of selling multimillion-dollar computers, it's offering to provide the computing power over a network for a monthly fee—or in the case of an e-commerce site, charge a percentage of the customer's transaction revenues. Ann Livermore, CEO of HP's \$14 billion Enterprise Computing Solutions, reckons such fees could account for 80% of the division's revenues eventually.

In redefining themselves, companies are also transforming their own industries. Hamel of Strategos recently spoke to grocery chain executives in Europe, who were worried about Wal-Mart Stores invading their territory. Hamel told them it was much worse than that: They're also in the gun-sights of engineering services behemoth Bechtel Group, which is spending \$1 billion to build out a massive logistics warehousing and distribution system for online grocery upstart Webvan Group Inc.

It's a frightening prospect, not knowing who your enemies are until they've already struck. What car dealer five years ago would have suspected a software company such as Microsoft Corp. would be one of their biggest competitors today? Could banks have guessed two years ago that online stockbroker E*Trade Group Inc. would siphon off their retail customers' accounts so easily? Sun Microsystems Inc. Chief Scientist Bill Joy even suggests a cred-

it-card company could offer PCs free to people who promise to buy online using their cards. Muses Joy: "Maybe the lead computer brand of the 21st century will be Visa."

In industry after industry, the interlopers are swarming locusts. From plastics to steel to consulting services, hundreds of upstarts such as PlasticsNet and e-STEEL are

ting up new, independent marketplaces only

Ultimately, they hope to become the new

for commercial activity in their industry

And as they gather detailed information

about what buyers and sellers want, they

could become more indispensable to e-

than conventional middlemen such

distributors.

LESS FRICTION. But wasn't the Internet

supposed to do away with middlemen?

After all, producers and customers

now connect directly. It turns out that

on the Net, buyers need middlemen

sort through the vast new choices

suppliers. And suppliers need to

where masses of buyers gather—where

usually isn't on individual company sites

Like eBay's for business, these middle-

men—variously called infomediaries, vertical

portals, or e-markets—are using the Net

instantly connect buyers and sellers anywhere

Because there's none of the friction of phone

faxes, or in-the-flesh meetings, these Net middle-

NET IMPACT

Energy

E-business 1999: \$11 billion

E-business in 2003: \$170.1 billion

Percentage of total in 2003: 12%

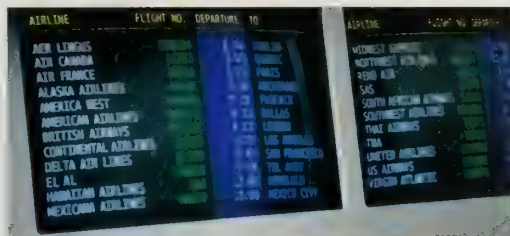
Led by online sales of natural gas, trading of energy is moving online in a big way. The appeal: big savings over conventional methods, such as brokers, and the ability to respond immediately to rapidly fluctuating demand.

Big changes are afoot as a result. Most of the transactions will veer from existing brokers to new online exchanges, such as Altra Energy and HoustonStreet.com. That will break down traditional geographic boundaries, spurring more competition for retail customers—and lower prices.



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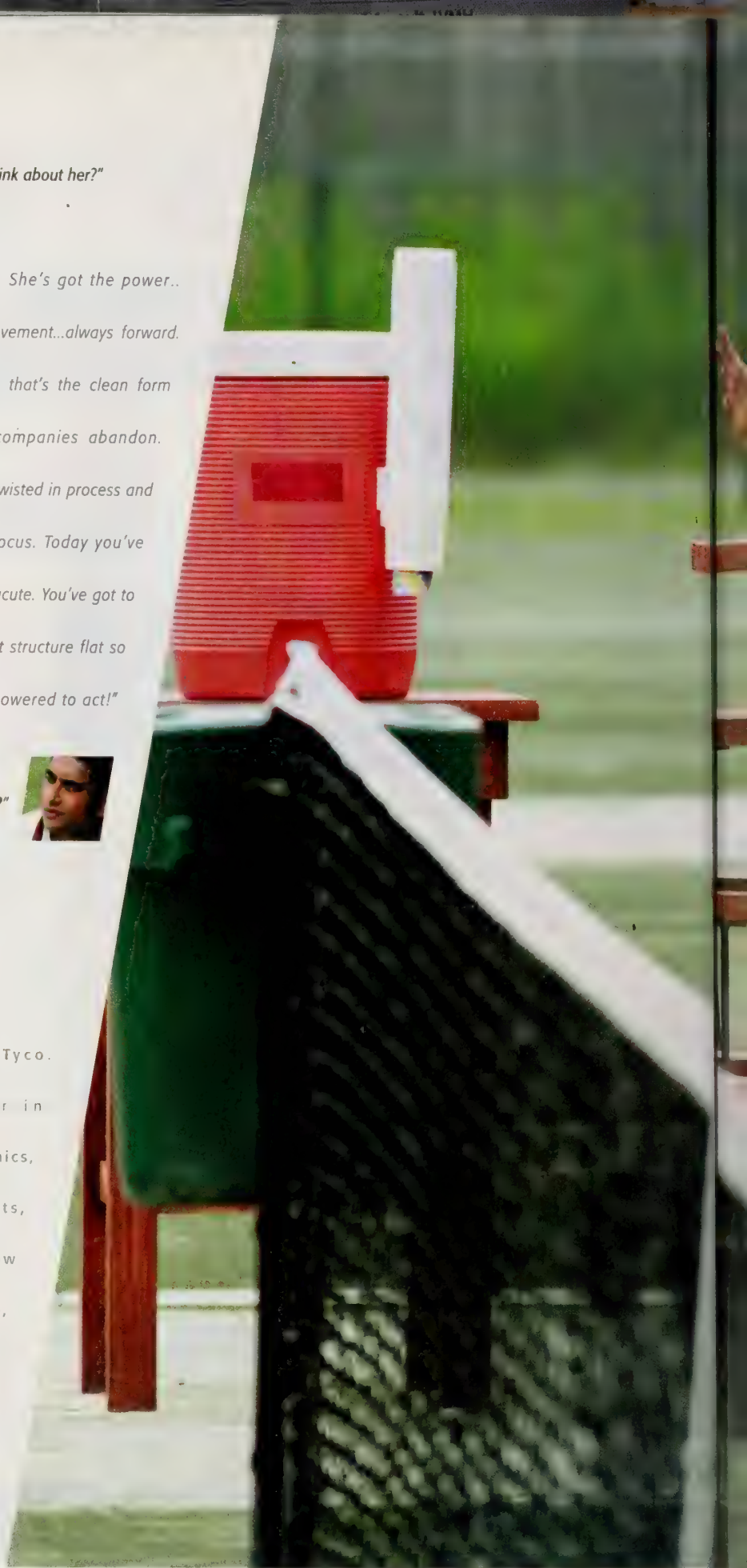


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can gather together vast numbers of buyers and sellers. Ultimately, this efficiency is likely to push profit margins down to the commodity-like levels of electronic marketplaces such as Nasdaq. But because of their central position, says Charles H. Finnie, an analyst with investment bank Volpe Brown Whelan & Co., these middlemen will control a quarter of the world's transactions between businesses by 2002. Says Finnie: "Most of the major industries will get turned on their ear."

Altra Energy Technologies Inc. of Houston is typical of these new creatures. Before the online marketplace was started three years ago, buyers of natural gas had to rely on cumbersome phone calls and sending faxes to sellers. That limited them to only a few potential deals and a lot of potential price manipulation by sellers who might know a particular buyer was desperate for supplies.

WINNER TAKE ALL. Now, Altra lets buyers trade anonymously on the Net with thousands of sellers. Since it's so much more efficient for buyers and sellers, it has quickly emerged as the main place to trade online, handling 40% of the industry's natural gas liquids. This year, transactions on the site will rise to \$12 billion. Says Altra Chairman E. Russell Brazier: "It's a winner-take-most business."

These middlemen are demonstrating an irony of the Net. Yes, it's a marketplace with low barriers to new entrants—but only if you get there first. And with few clues to legitimacy online, brands provide even more pull than in many traditional businesses. Then there is the snowball effect: Once a Web site gathers a mass of buyers, in flow the sellers—whose products then draw more buyers. It's a fast-moving virtuous cycle that quickly builds one dominant player. Think Amazon in retailing or eBay in person-to-person auctions. All that portends even more consolidation online than in the physical world. "There will be thousands of win-

ners on the Internet," says Morgan Stanley Dean Witter analyst Mary G. Meeker. "But there will be only very few really big winners."

Becoming one of those big winners is particularly hard for established companies. While online starts got massive market caps going after the next big Net idea, Charles Schwab & Co. endured the wrath of Wall Street when it cut online trading commission fees in 1995 and gave up \$150 million in commission profits. But it paid off. Now, its market share is more than double industry upstart E*Trade, and its \$30.6 billion market cap tops Merrill Lynch's by more than \$4 billion.

Business has never been about avoiding tough choices. What's different this time around is that experience may be the worst teacher of all. That's unlikely to change until technology slows down—and there's no sign of that. No wonder even successful managers have the feeling that something fanged and scaly is sneaking up on them. "I don't think we've seen the biggest changes at all," says Dell Computer CEO Michael Dell. Those adrenal glands we developed eons ago could come in very handy.

With Kathleen Kerwin in Detroit, Peter Burrows in San Mateo, Calif. and Diane Brady in Greenwich, Conn.

NET IMPACT

Travel

E-business 1999: \$12.8 billion

E-business in 2003: \$67.4 billion

Percentage of total in 2003: 17%

Both consumers and businesses are bypassing travel agents to book tickets and other travel arrangements online. That's just fine with the airlines: It costs them only \$1 to process an e-ticket, compared with \$8 for an agent-booked ticket.

But it's tough sailing ahead for agents, many of whom are already drowning from airline commission cuts in recent years. By 2002, estimates Jupiter Communications, airlines will account for 62% of online bookings, compared with just 20% of conventional ticket sales.



An irony of the Net: It's a marketplace with low barriers to new entrants, but only if you get there first

E-BUSINESS = MC2

COGNOSCENT BRINGS MAINFRAME PERFORMANCE TO INTERNET COMPUTING

This past June, online auction powerhouse eBay suffered a fatal database server error that shut down its business for nearly a full day, terminating hundreds of thousands of auctions in mid-stream. The cost to the company: \$5 million in refunds and extensions and a loss of 20% of its stock value. Then, two months later, it happened again: a hardware failure took the auction site offline for another 10 hours, prompting a 10% decline in eBay's stock price.

Had the victim been AT&T or the U.S. stock exchange, the cost to the global economy would have been incalculable, the outcry deafening. As it was, the eBay blackouts caused barely a blip on the national radar, and the popular site was soon online again, little the worse for wear.

Or was it? "For now, outages like eBay's are regarded almost as a curiosity, the growing pains of a young enterprise," says Bernard' Boar, author of the seminal Blueprints for Enterprise IT Architectures. "But as the Internet—and mobile computing in general—become central, mainstream functions of everyday business, such performance problems will increasingly be treated as the financial calamities they are."

INDUSTRIAL STRENGTH PERFORMANCE

Paul Tocatlian's job is to prevent such calamities long before they occur. A friendly, unassuming man with a quick smile and an easy-going demeanor, he hardly seems like someone burdened with the responsibility for billion-dollar fortunes. But he's that and more. He's a man on a mission: to bring indus-

trial strength performance to Internet and mobile computing.

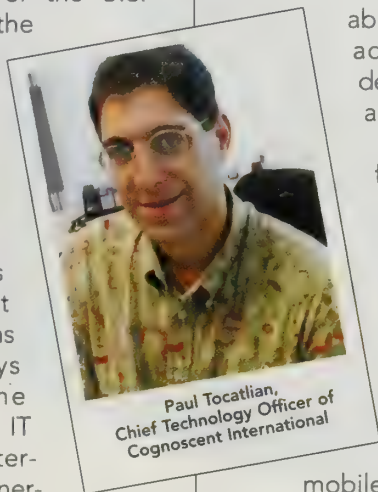
Mr. Tocatlian is co-founder and Chief Technology Officer of Cognoscent International, an Internet professional services company with offices in New Jersey, Washington, D.C., and Silicon Valley. Among a crowded field dominated by traditional systems integrators, Cognoscent is a company with a difference: an unrelenting focus on the creation of mobile, distributed computing solutions that possess all of the mission-critical reliability, availability, and other performance characteristics that have long been demanded of mainframe applications and services.

"The performance requirements for distributed computing are no less stringent than for the centralized systems that have reigned since computing's early years," says Mr. Tocatlian, who has helped oversee mission-critical application developments for such industry giants as AT&T, Fidelity, and United Airlines.

"In fact, because Internet and mobile computer users tend to work from diverse locations with widely differing connectivity, security, and network stability, the performance challenges are even greater than with more traditional systems."

A \$4 BILLION PROBLEM

And the potential costs of failure no less ominous. Auction pioneer eBay is not alone in suffering financially damaging outages. Such blue-chip sites as ESPN, Amazon.com, and E*Trade have experienced costly blackouts in recent months, with E*Trade losing 22% of its market value in just three days. And



Paul Tocatlian,
Chief Technology Officer of
Cognoscent International

(Continued)

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E-BUSINESS=MC2

that says nothing about the egregiously slow download times that plague a large proportion of high-end sites—wait times that are particularly troublesome for mobile computer users with low-speed modems and ordinary telephone connections.

Overall, reports Zona Research, Inc., businesses are losing a cumulative \$4.35 billion per year of e-commerce revenue because of unacceptable download times. A key reason, Harley Manning, research director for Forrester Research, points out in Information Week, is that only 2% of visitors to e-commerce sites actually buy something. "One of the biggest reasons that people leave," he reports, "is because they're having a lousy experience—either pages aren't available or they take so long to download that it's just not worth it."

And that's just the tip of the iceberg. According to Mr. Tocatlian, the hidden costs of poorly performing distributed systems within firms are even greater—especially with industry leaders ranging from Intel to Prudential to MasterCard starting to build their entire corporate networks around the mobile computing paradigm.

MISSION-CRITICAL MOBILE COMPUTING

"When a traveling executive can't access her e-mail or a sales consultant can't transmit a contract, millions of dollars can be lost in an instant," he says. "Repeat that experience a thousand times a day, and you can begin to see the magnitude of the problem."

Cognoscent's answer to the sluggish and unreliable performance that often characterizes Internet-based and mobile computing networks is a comprehensive development framework called MC2—mission-critical mobile computing. "The performance of a distributed computing system is determined at the outset of an engagement," he says. "By the time the system is deployed, it's usually too late."

COGNOSCENT'S KEY ELEMENTS

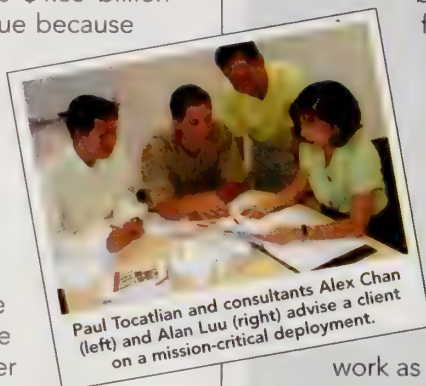
The MC2 framework is built around three key elements. First is methodology. Cognoscent employs a rigorous four-phase development protocol of the kind normally reserved for multi-million-dollar mainframe projects. Central to this approach is the implementation of best practices, culled not just from the Internet, but from mission-critical mainframe and client-server implementations.

Second is Cognoscent's use of what Mr. Tocatlian calls "the enterprise view." A critical part of the strategic planning process, he says, is understanding the full range of demands likely to be placed on an application or net-

work as usage grows. "We have to build systems based on tomorrow's performance requirements, not today's."

Finally, and perhaps most important, is the selection of best-of-breed components that, Mr. Tocatlian notes, "sometimes seem like overkill... until your system goes down." Among the components that Cognoscent typically recommends are names one usually encounters only in large, internal implementations: enterprise-class servers, databases, transaction servers, and BroadVision content-management engines—all driven through high-performance remote access units like Toshiba notebook computers.

Bernard Boar, the enterprise architecture strategist, notes that "a dollar spent now is worth ten or a hundred later in higher performance, faster throughput, and reduced downtime." After all, he says, with growing dependence on mobile computing, "a traveling executive wants to take his whole world with him—not just part of it."



Paul Tocatlian and consultants Alex Chan (left) and Alan Luu (right) advise a client on a mission-critical deployment.

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Customers Move Into the Driver's Seat

PERSONALIZED PRODUCTS BECOME VIABLE WITH THE NET • BY OTIS PORT

A Copernican revolution of sorts is under way. Executives used to imagine their companies as the center of a solar system orbited by suppliers and customers. The Internet

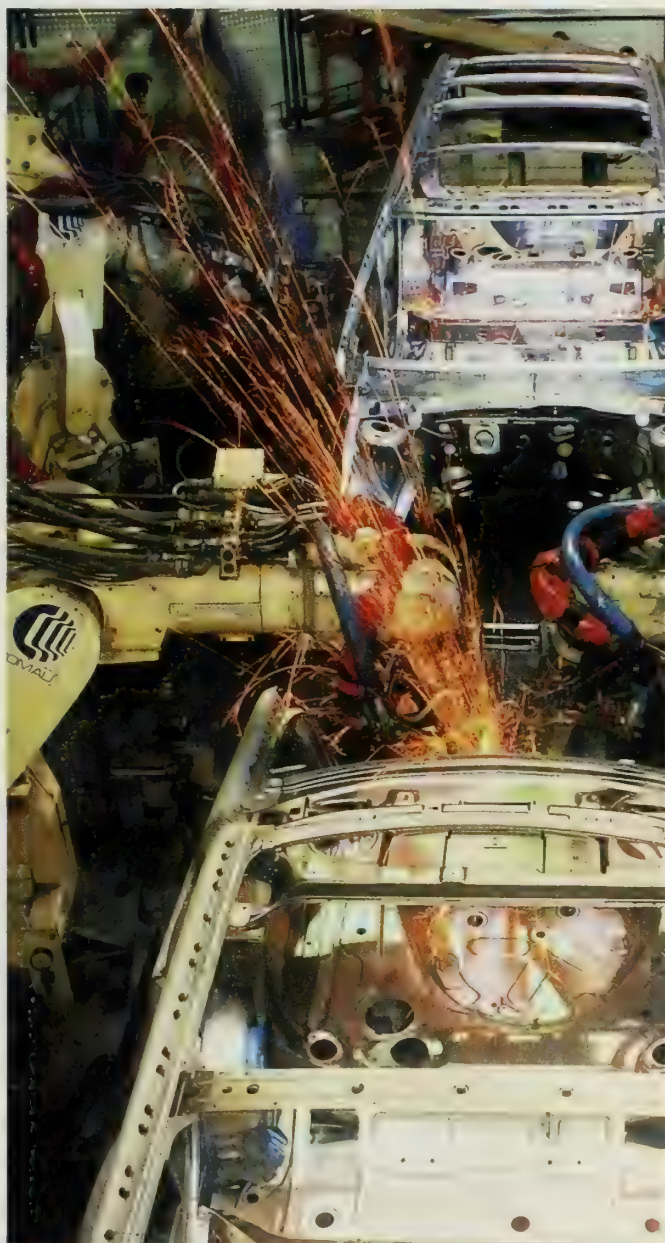
is changing that—dramatically. Now the customer is becoming the center of the entire business universe.

For companies in the business of making products, the challenges ahead are particularly daunting. That's because every manufacturer is surrounded by rings of suppliers and distributors. To become customer-centric in the Internet age, they all will have to perform complex, synchronized movements. The solution: also the Internet. Increasingly, the net is forging direct links between customers and factories, so buyers—now mainly corporate customers—can tailor products the way they want them.

**the
Internet
age**

But online consumers can flex just as much muscle as corporate customers. Already, Dell Computer Corp. and others encourage shoppers to customize products to their liking on their Web sites.

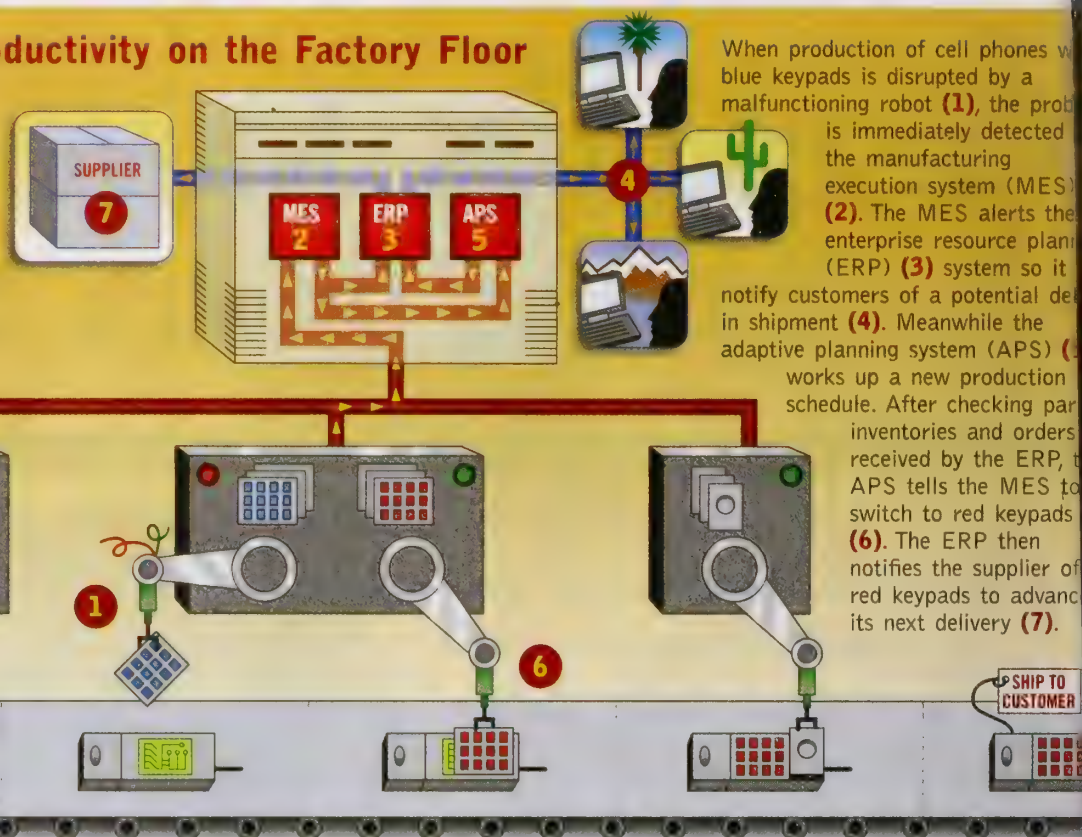
Next, in a much more involved effort, General Motors Corp. and Ford Motor Co. will soon join Toyota Motor Corp. in giving the same power to car buyers. "The customer will be able to configure the vehicle over the Internet" and climb behind the wheel within a few days, declares Mark T. Hogan, the manufacturing executive named to head GM's new online division, dubbed e-GM. Today it takes weeks to get a customized car, because assembly lines are geared to turning out standard cars. To fill orders in Internet time, the mass-production model pioneered by Detroit will have to be revamped—and perhaps eventually scrapped. Where the carmakers go, other manufacturers are sure to follow. Soon consumers may be able to personalize almost any standard-



VOLVO ASSEMBLY LINE: Making cars ordered on the Net

Boosting Productivity on the Factory Floor

Traditional factories have been islands separated from corporate headquarters. New software is bridging that gulf



ized product, from cellular phones to kitchen appliances.

Pulling this off requires a vast network of computers to deal with the flood of data unleashed by online orders. "With Internet commerce, you're dealing in lots of 'eaches,' not a truckload of identical products," says Michael A. Schmitt, senior vice-president at J.D. Edwards & Co., a Denver software vendor. Each custom order can require a slightly different mix of parts for the final product, and that triggers dozens or even hundreds of purchase orders to parts and materials suppliers. "If you tried to handle all this on paper and over the phone, it would never get done," says Schmitt. "Computers have to talk to other computers."

PIVOTAL CHANGE. Earlier, companies tried to automate such transactions with private networks. Detroit's Big Three and retailers like Wal-Mart Stores, Sears, and Dayton Hudson have electronic data interchange (EDI) systems that zip information around the supply chain. However, EDI systems are costly to install and operate, "so no company ever connected with more than the top 20% of its trading partners," says John J. Fontanella, director of supply-chain research at market-watcher AMR Research Inc. in Boston. Now the Internet is cheap enough that even small job shops can afford to hook up. As a result, "we'll see 90% of manufacturing move to the Internet" in short order, predicts Fontanella.

That's because the Net is bringing on a pivotal change in manufacturing economics: Custom manufacturing can be cheaper than mass production. If that seems hard to imagine, take a squint at how it works for Cisco Systems Inc. First off, Cisco outsources most production to contract manufacturers that operate 37 factories, all linked via the Net. Suppliers not only make all the components and perform 90% of the subassembly work but even do 55% of the final assembly. So suppliers reg-

ularly ship finished Cisco computers to Cisco customers without a Cisco employee ever touching the gear. The result is "saving of between \$500 million and \$800 million this year," compared to what it would cost to own and operate those plants, says Carl Redfield, Cisco's senior vice-president for manufacturing.

In addition, roughly 80% of Cisco's sales are generated on its Web site. Customers use a program that walks them through the task of configuring a system to fit their specific needs. After the software double-checks the orders, they go straight to Cisco's gun-for-hire producers. Thus, Cisco needs fewer salespeople, technicians, and paper-shufflers. "We can go from quote to cash without ever touching a physical asset or a piece of paper," boasts executive vice-president Donald Listwin. "You've heard of just-in-time manufacturing. Well, this is not-at-all manufacturing."

One risk of heavy outsourcing is that a company can lose touch with the manufacturing expertise that contributes to continuing product improvements. To preclude that, Cisco also designs the production methods—and uses the Internet to monitor operations at its contract producers around the clock. "We develop the entire process, and we know what every supplier is doing every moment," says Redfield. "The source code for all this is developed here and maintained here. So the innovation is all here."

VIRTUAL PARTNERSHIP. The sea change flowing from the Net is so profound that owning a factory is increasingly regarded as a liability. Hewlett-Packard, IBM, Silicon Graphics, and others have sold plants to contract producers such as Soletron, SCI Systems, Flextronics, and Celestica—then signed up these manufacturing specialists as suppliers. Some experts imagine that many enterprises will ultimately become tripartite virtual partnerships. One arm will handle product development and



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CISCO'S REDFIELD: Although the company outsources most production to contract manufacturers, "we know what every supplier is doing every moment"

engineering, another will take care of marketing, and the third will do the production chores. "We've got a whole different world emerging," says Bryan D. Stolle, president of Agile Software Corp., a San Jose (Calif.) provider of supply-chain management software for coordinating distributed manufacturing.

In theory, even the auto industry could switch to not-at-all manufacturing. As a practical matter, though, the unions may never allow that. Hogan of e-GM has long advocated more outsourcing—largely in vain, because of union opposition. But if GM can get its supply chain in sync, it could still get its factories in better tune with car buyers. "We'll very quickly get to the five-day car," says Hogan.

ME-TOO PROJECTS. The five-day car is a revolutionary concept pioneered by Toyota and other Japanese carmakers in the early 1990s. They envisioned the Cisco and Dell approach: Customers would pick and choose from a menu of onscreen options, then hit a button to send the order straight to the factory. Toyota has been equipping showrooms in Japan with Internet terminals since 1995.

Japan's vision "captured everyone's imagination," says Hogan, and ignited a flurry of me-too projects in the U.S. and Europe. Already, Ford's Volvo subsidiary is testing factory-direct sales via the Internet in Belgium. So Hogan admits GM has some catching-up ahead.

Auto makers aren't planning to offer customized cars just to make customers happier. They also want some of the bottom-line savings that companies like Cisco have achieved. All those mass-produced cars sitting for weeks in dealer lots represent a huge investment that yields no return until a buyer comes along. Studies indicate that shifting from mass production to direct factory sales could slash car

prices by up to 30%. "Trimming that inventory would take out a lot of cost," Hogan says. "But it will require moving at Internet speed in the backend of the business, on the assembly line and on the shop floor of GM's parts and materials suppliers."

That's where new types of software can help. Since 1978, companies have been putting in ever more sophisticated systems to boost manufacturing efficiency. One is enterprise resource planning (ERP) software from such vendors as SAP, PeopleSoft, Oracle, J. D. Edwards and Baan. With ERP, factory operations are tied to other corporate departments, such as purchasing, so parts can be ordered for just-in-time delivery.

Until recently, though, ERP systems didn't know what was happening on the shop floor. Newer software is bridging that last gap. A manufacturing execution system (MES), for example, coordinates shop-floor operations and provides a real-time picture of how the plant is running. When a problem pops up—a robot goes haywire or a parts delivery fails to arrive on time—an adaptive planning system analyzes its impact. Then it modifies the production plan to make optimum use of whatever resources are still available.

These new technologies will be crucial to handling tomorrow's steady stream of custom orders from the Internet. ERP without MES is like running a modern factory while using the Pony Express for communications, quips Schmitt of J. D. Edwards. But together, they can work wonders. For instance, J. D. Edwards teamed up with MES specialist Camstar Systems Inc. in Campbell, Calif., to help Lexmark International Inc. slash production cycles for computer printers by 90%.

A printer that used to take four hours to assemble now gets made in Internet time—24 minutes.

So industry finally has the tools to create virtual enterprises, with online links that span the entire manufacturing chain, from automotive giants to local job shops. If the carmakers can coax their thousands of suppliers into the online galaxy, even the most traditional companies could soon be exploring new manufacturing realms that give customers precisely what they want.

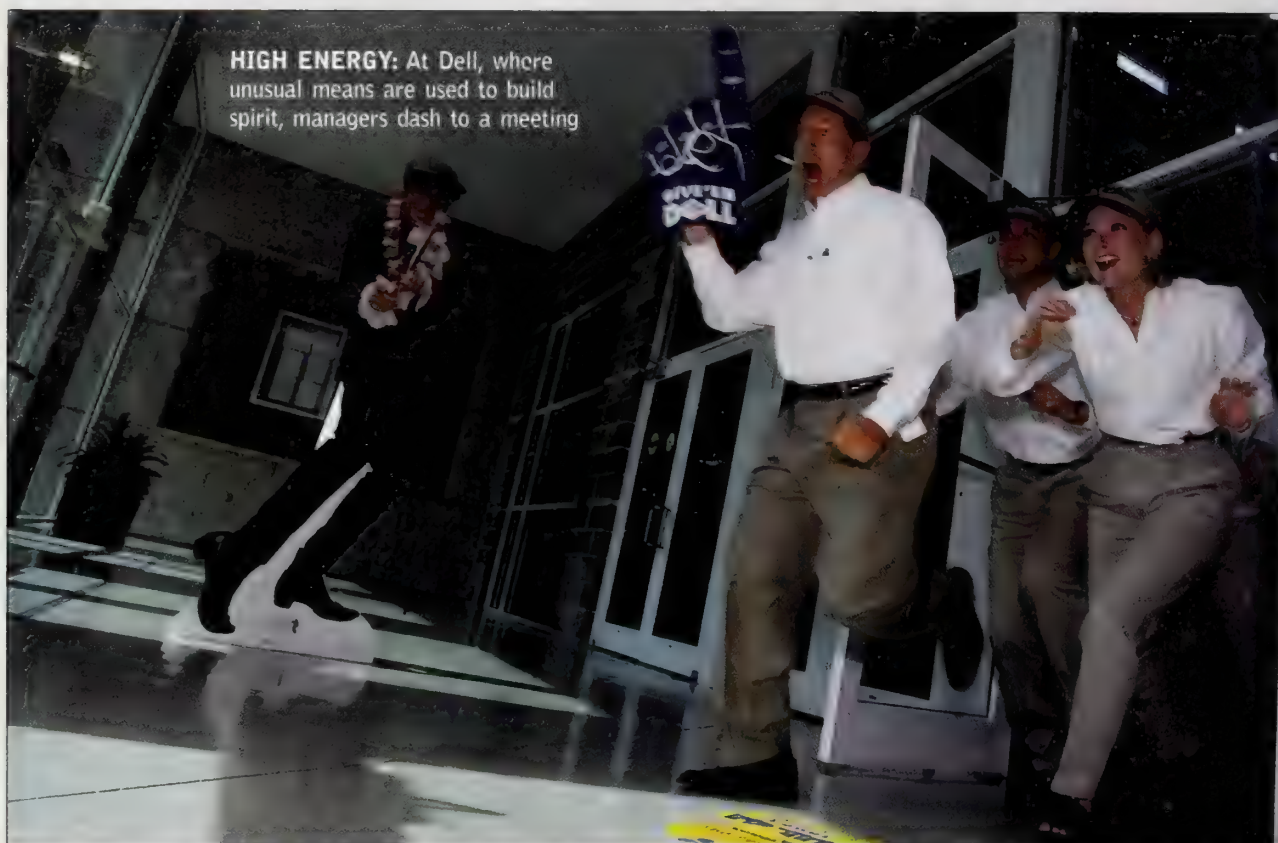
FAST FORWARD

In 1998, companies farmed out 15% of all manufacturing. In 2000, they will outsource more than 40%. HAMBRECHT & QUIST

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HIGH ENERGY: At Dell, where unusual means are used to build spirit, managers dash to a meeting

The Search for the Young and Gifted

WHY TALENT COUNTS • BY JOHN BYRNE

For companies on the cusp of the Internet Age, the resource in shortest supply is neither raw material nor capital, neither powerful

technology nor new markets. What keeps managers up nights at these companies is the scarcity of brainpower, the talent that give wings to visions of a future that becomes the present at the speed of light. "Capital is accessible, and smart strategy can simply be copied," says Ed Michaels, a McKinsey & Co. partner. "The half-life of technology is growing shorter all the time. For many companies today, talented people are the primary source of competitive advantage."

People bring imagination and life to a transforming technology. They bring success and profit to simple and complex ideas. Or, as Dell Computer Corp. Vice-President Theresa Garza puts it, they bring "hum." Not the whirling white noise emanating from your computer, but the very tangible sense of fully engaged people, channeling unbounded energy into the work. "You know it as soon as you enter a building," says Garza, general manager of Dell's large corporate-account group. "You can tell when a company feels dead just by walking through its halls. We try to create the hum. It's people who have momentum, who are working hard, and who are excited to be here."

To get hum, Garza has flung herself onto Velcro walls and had fellow employees dunk her in a water tank—all in the name of generating enthusiasm and encouraging accessibility. It's a far cry from IBM founder Thomas Watson sitting with his hands folded behind a "Think" sign in a library with Old World overtones. But those two images are emblematic of the vast differences between the enterprises that will define the Internet Age and the companies of previous eras.

Watson and earlier chieftains constructed

the
internet
age

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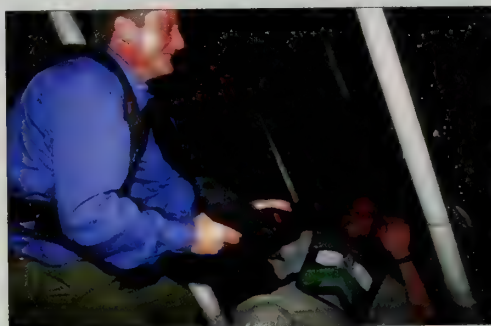
Managing to Have Fun at DoubleClick

At the online advertising company, the CEO clowns around with recruits



UNCONVENTIONAL BOSS:

CEO Kevin O'Connor leads a game of Lazer Tag at ClickerCamp, a weeklong orientation for new employees. Most came from more traditional companies



PURPOSE:
The goal is a creative atmosphere



ed organizations that were models of order, logic, and conformity, the latter best symbolized by the white shirts and stiff collars every IBM salesman had to wear. The hierarchy and bureaucratic protocol that were the hallmarks of those corporations were crucial to success in an age when change came slowly and markets were largely domestic.

Today, Watson's "Think" motto contrasts with Andrew S. Grove's notion that "only the paranoid survive." Why? Inevitability, as the stumbles of many once-successful corporations have shown, breeds arrogance and insularity. As CEO of Intel Corp., Grove showed that the "paranoid" are not going to take for granted their customers, markets, or employees.

Today's managers recognize that flat organizations of empowered people are critical to gaining quick decisions in a global marketplace that moves at Net speed. The lone corporate soldiers, often second-guessed by layers of managers who policed decision-making, have been replaced by teams of people with the autonomy of small-business owners. Internet Age companies rely on the initiative and smarts of individual employees to foster decisions that are closer to the customer and therefore more responsive to the market. The ultimate goal, says CEO Jorma Ollila of Finland's telecom giant Nokia, is "flexibility, an open mind, and transparency of organization."

How do the smart companies get it? They restore meaning to the Dilbert-scorned rhetoric that "people are our most im-

portant assets." The best of the Internet Age breed, from America Online and DoubleClick to Cisco Systems to Federal Express, are rewriting the rules of intellectual capital—setting new standards for how to attract, cultivate, and retain talent in an era in which people matter more than ever. And they're using the Net to transform the care and feeding of human assets and to transcend traditional boundaries.

Consider Planet-Intra.com Ltd., a year-old software company that is nominally based in Mountain View, Calif. Alan McMillan, the 37-year-old founder and CEO, is a Canadian who had been working in Hong Kong. The company's product was written by a software team in Croatia. The vice-president of technology is Russian, while the vp of international sales is German living in Tokyo. They use the Internet—in fact, the company's own product—to collaborate across borders. "We live and breathe the Internet," says McMillan.

In this new environment, the most successful companies are endowing entry-level employees with the reverence once accorded only to customers. They are working to fulfill the desire for meaning and belonging by creating egalitarian meritocracies. And they are paying generously for performance, not only with cash, but with ownership. As Cisco Systems Inc. CEO John T. Chambers puts it: "The New Economy is heavy on intellectual capital. The sharing of knowledge is what really makes it go. In the New Economy, you expect lifelong learning



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not necessarily lifelong employment. People used to work for wages. In the New Economy, they work for ownership. Security comes from the stock. Labor often fought management in the Old Economy. Today, teamwork and empowerment are crucial to success."

MORE PASSION. In short, the world economy is going through a seismic shift to intellectual capital from capital investment. That's why computer mogul Michael S. Dell made people No. 1 on his top 10 list of priorities to executives earlier this year. And at a company adding more than 8,000 people this year to its 29,000 employees, the talent must be hired and developed fast. Amazon.com Inc., the company that is synonymous with the Internet way of doing business, understands the imperative all too well. "The thing that has constrained us for the last four

years has always been people bandwidth," says Amazon CEO Jeffrey P. Bezos. "Just having enough smart, hard-working, talented, passionate people to execute against our vision."

To glimpse this changing world, visit some of the companies that are charting new territory. Begin in a New York City area known as "Silicon Alley." In the basement of a nondescript building on Madison Avenue, some 30 new employees of Net advertising pioneer DoubleClick Inc. are gathered for the first day of a week-long orientation called "ClickerCamp."

DoubleClick would not exist without the Net. It sells online advertising for Web sites, then constantly delivers the ads to viewers who fit the profile of advertisers' prospective customers. DoubleClick can direct ads to Web users within milliseconds of their checking into a Web site. The company's revenues rose 162% last year, to \$80 million.

In this windowless room, the twenty- and thirtysomething recruits, just a fraction of the hundreds DoubleClick will add this year, have a couple of things in common. The vast majority have left more conventional environs such as American Express, Mobil Oil, Time Warner, Andersen Consulting, and Saks Fifth Avenue. What is more surprising is that over half were hired because they know someone at DoubleClick. The company, which gets 20% of its employees via the Net, believes that referrals sharply reduce mis-hires.

After the coffee and pastry preliminaries, ClickerCamp starts with CEO Kevin O'Connor, 38, an engineer who founded the company after several years with a software outfit that had purchased his earlier startup. With employment nearing 1,000, O'Connor and his management team insist that every new recruit, from the New York receptionist to the new salesperson in Paris, knows how crucial he or she is to the company's success. "Every company makes the customer a priority," says Kevin P. Ryan, DoubleClick president. "Not every company makes their people and their culture priorities. We do. It's more important that I take care of employees than our customers."

Before the week is out, O'Connor and other leaders will engage the recruits in a game of Lazer Tag and join them

for drinks at a nearby bar. "We try to do everything we can to bring people together," says Ryan. "When you bring together 30 people who enjoy jazz or skiing, the company becomes part of the social fabric of a person's life."

EXPLOSIVE. The class, however, is strictly business. O'Connor articulates the company's goals and strategy and serves enough inspiration to ready an army for battle. "We are making history," he says. "We are building a great company in an explosive industry. This



The world economy is going through a seismic shift to intellectual capital from capital investment

SECOND SENSE: "You can tell when a company feels dead just by walking through its halls," says Dell VP Garza. "We try to create hum. It's people who have momentum..."

the fastest-growing trend in history. It beats fire, the wheel, the telephone and television, cell phones. Nothing has touched so many lives so quickly. We're going to do some incredible things here." Before leaving, he fields questions and gives out his home telephone number.

By the time ClickerCamp is out, all of the senior managers will have fulfilled their duty to appear. After all, every employee is asked annually to rate his or her manager on 25 criteria. The ratings answer two key questions: Did managers hire good people? Did their employees like working for them? "Most organizations focus only on the re-



When you call up and say you're a small business, do some businesses make you feel, well, um, small?

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sults. But if you do the first two, I know the results will happen," says Ryan.

Like DoubleClick in New York, Dell Computer Corp., just outside Austin, Tex., puts a laser focus on speed and teamwork. "There's a tremendous velocity to business here," says Jay Martin, 28, a planning manager who joined Dell last year after earning his MBA from Duke University. "You make decisions every day without 100% of the information, and you have to be comfortable doing that. Every Sunday night, I look forward to Monday morning. I don't think there could be a stronger endorsement."

Finding people like Martin is an all-consuming priority at Dell. Recruiters start with substantial research on what it takes to succeed. Besides confirming the necessary functional or technical skills, managers test applicants for their tolerance of ambiguity and change and their capacity to work in teams and learn on the fly. At the VP level, candidates are sent to a consultant for a lengthy behavioral interview and extensive pencil-and-paper testing. "It is a high-risk, high-reward environment," says Andy Esparza, vice-president for staffing. "We have to screen for people who can thrive in that kind of culture." Even when growing at hyperspeed, hiring just to fill seats won't do, says Esparza: "Short-term decisions or compromises you make today in the interests of getting something done will cost you later on."

Once hired, you don't just settle in at Dell. To assure quick assimilation, every new employee is given specific performance goals to reach in the first 30 days. Informal and formal buddy systems pair newbies to vets. Executives host informal monthly chat sessions with small groups of managers to mentor them along.

If all goes well, Theresa Garza, who leads the 600-employee large corporate-accounts group, can create the "hum" she talks about. Her goal is a function of leadership and organizational culture. It demands clear communications. In the first two weeks of a quarter, Garza will articulate her group's objectives on five different occasions. Every leader will have heard the message at least three times. Why? "People get frustrated when they are not on the same page," she says. "When everyone has the same agenda, it breaks down frustration and politics." **ODD OUTFITS.** Fun, says Garza, is another key ingredient. She has shot off a gun in a magician's show trick, belted out a tune on stage, and dressed up in odd outfits to inspire the troops. "Humiliation," laughs Garza, "is a great motivator. It makes executives more approachable, and it's just fun, and people like it."

Fast growth, meantime, helps keep peo-

ple engaged and emotionally committed. Every quarter, Garza hires 10% to 15% of her 600 employees from outside Dell. An additional 8% to 10% are promoted or put into "stretch" assignments for further development.

Move west to Cisco Systems in San Jose, Calif., and you'll find one of the most enterprising acquirers of talent in the world. Cisco, which provides switches, routers, and other plumbing for the Internet, recruits people in the most hotly competitive talent market in the world: Silicon Valley. Besides the more typical use of job fairs, Cisco has recruited at the Los Altos Wine & Art Festival and the San Clara Home & Garden Show. The company has even parked a mobile billboard alongside a congested freeway, suggesting weary drivers that they could cut their commutes by working for Cisco.

Mostly, though, the company has aggressively employed the Internet to draw talent. After all, the Internet is clearly a self-selecting environment for the kind of people Cisco wants. So Cisco runs banner ads on dozens of Web sites, from Scott Adams' Dilbert site to Travelocity. By using DoubleClick's technology, Cisco ads pop up for people surfing the Web from specific addresses, including its leading rivals, says Michael McNeal, Cisco's employment director.

As many as 70% of the 20,000 résumés Cisco receives monthly arrive in digital form. And only one of every four is even read by a person. Cisco software screens résumés for key words. The company plans to refine the process by textually analyzing the résumés of successful hires, then using that knowledge to screen incoming résumés more efficiently.

Cisco's staff of 100 recruiters eventually winnow the number of applicants for each job down to three to five so managers can interview them. "The irony of Internet recruiting is that it can actually be more interactive and personalized than the old paper-based way," says Barbara Beck, senior vice-president for human resources. Cisco's goal is to hire people quickly after they apply—in effect, grabbing them while they are hot.

Cisco is a prime example of another defining characteristic of the Internet Age: adding brainpower by takeovers. Some companies acquire others to increase market share and build economies of scale. Cisco, with annual sales of \$12 billion, has grown tenfold in five years, in part through some 30 acquisitions, many of them rich in talent. One of every four employees arrives via acquisition. "The key to our success is understanding that we are acquiring people, not technology," says Donald J.

FAST FORWARD

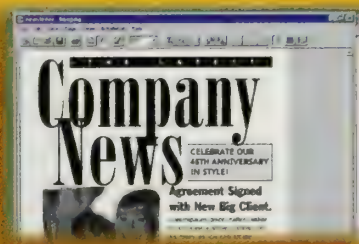
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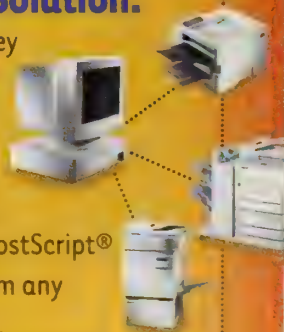


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Listwin, executive vice-president. "Technology is moving so quickly that the products are dead in 18 months. So it's important to give people in acquired companies bigger jobs, not smaller jobs."

They work in a culture informed by the mistakes of more traditional companies. A former IBMer, CEO Chambers was sometimes expected to fetch a soda or carry the bags of a superior. "I won't ask anyone to carry a bag for me," he says. "You never ask your team to do something you wouldn't do yourself."

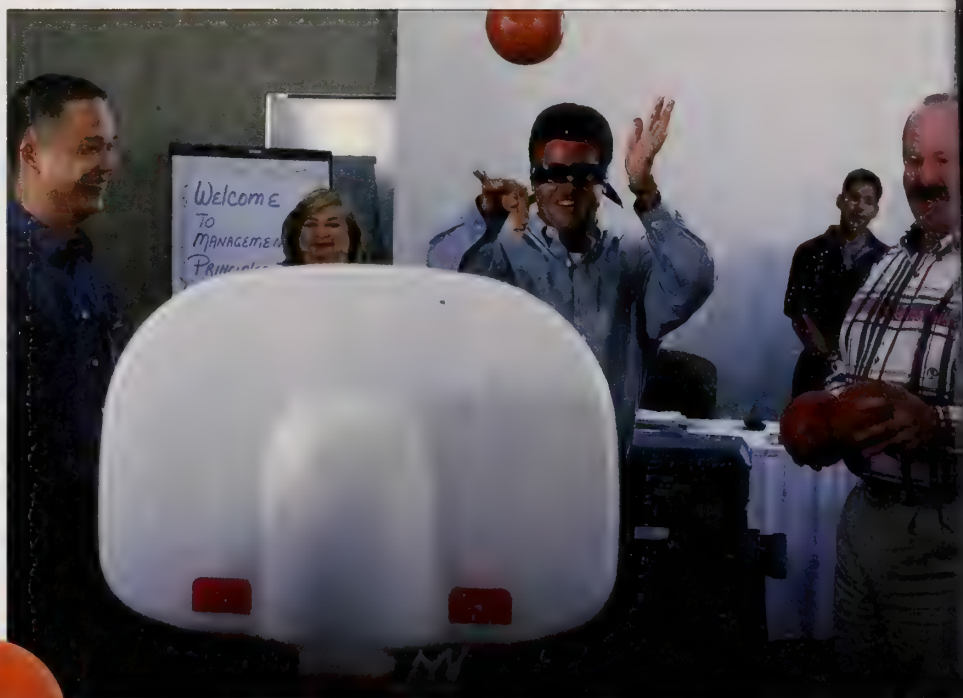
You share time and money with them, too. Once a month, Chambers holds court at a breakfast for employees whose birthdays fall that month. Stock options, moreover, are generously parceled out as an enticement and a retention tool. All employees get options on stock, which has risen more than 135% in the past 12 months.

One result: Cisco's turnover is extraordinarily low—just 6.7% per year in an industry with typical rates of 18% to 28%. Yet about half of Cisco's turnover rate is involuntary, a result of the company's policy of annually trimming the bottom 5% of its staff. "The decision of who to let go has nothing to do with length of service or level," says Beck. "It's 'are you adding value?' or 'do you fit the culture?'"

Head back east, to Memphis, and Federal Express Corp.'s sprawling headquarters. The overnight delivery company, which hired 34,300 people last year, boasts a turnover rate for management and full-time salaried employees of a mere 4%.

How does FedEx keep turnover so low? Hiring practices that echo Dell and Cisco are just the start. FedEx also assiduously develops its homegrown talent, largely through a commitment to continuous learning. FedEx may be the ultimate corporate university. "One reason people like to work here is that they just don't come in with a set of skills that stay stagnant," says Larry McMahan, vice-president for human resources. "We believe heavily in individual development. We have extensive training."

FedEx plows 3% of total expenses into training, six times the proportion at most companies. And other companies typically spend the lion's share of training funds on managers. At FedEx, front-line and second-level managers must attend 10 to 11 weeks of mandatory training in the first year. Tens of thousands of employees from couriers to top executives have gone



FedEx plows 3% of **total** expenses into training, **six times** the proportion at most companies

A BONDING EXPERIENCE: FedEx workers play basketball blindfolded under the direction of their managers who can see. The object of the game is to build trust

through the Leadership Institute just outside Memphis. Week-long courses drill people in the company's culture and operations. Bonding exercises include blindfolded games of basketball where participants must rely on coaches without blindfolds to find the goal. The training is a critical component of the company's open and progressive environment. "What attracted me was FedEx' intensity and passion toward creating new kinds of business," says David Roussain, a former Hewlett-Packard Co. manager who joined FedEx as vice-president for e-commerce and customer service in January. "FedEx is an action-oriented company."

The Net helps. "An unbelievable amount of decisions are made over e-mail," says Roussain. "It tends to push issues faster and quicker and allows for a freer exchange of opinion. It is also a safe environment to raise issues." When the company's service reps recently griped that they wanted more latitude to solve customer problems, the company invested in new networking systems to give the reps the additional information they needed to make decisions.

A small step, perhaps. But it's one of many that bespeak the initiative, fast response times, and bureaucracy-busting that help to define the Internet Age. Watson's goal of getting his employees at IBM merely to "Think" is now a given, if not a starting point, toward getting the best people to work smarter in an ever more challenging epoch.

*With Andy Reinhardt and Robert D. Hoyle
in San Mateo, Calif.*

Computer gremlins mangle and abuse yet another email attachment.

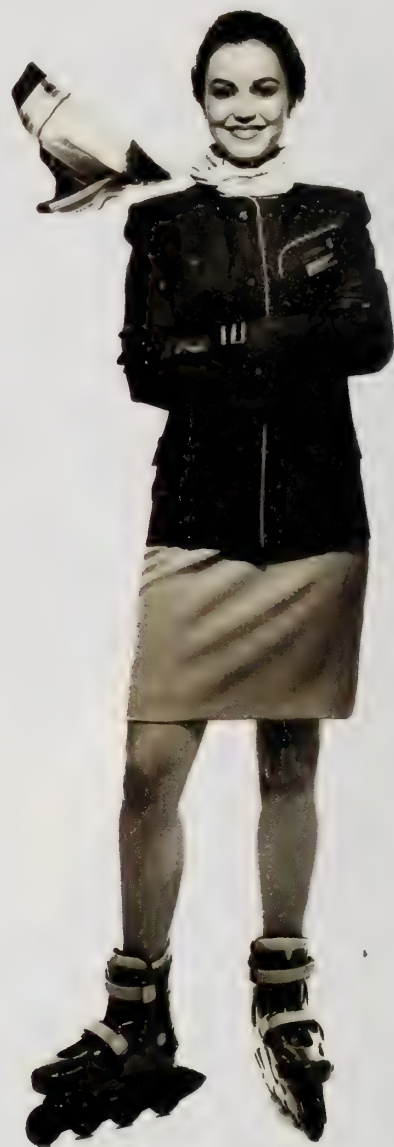


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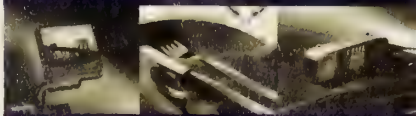
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COVER STORY

Through seven decades, tracking business—and the world

It began at a seminal moment—Sept. 7, 1929, a scant seven weeks before the great stock market crash, and with a warning of “the inevitable readjustment that draws near.” It also began with a rhetorical question: “Why The Business Week?”

The answer in the pages of this first issue, 70 years ago, rings true today. The magazine “never will be content to be a mere chronicle of events. It aims always to interpret their significance.” And it “serves no single group” but is “the liaison agent” that “will tell the banker what he needs to know about the textile industry” and vice-versa.

The array of covers over the seven decades since is dramatic evidence of where this approach has led—often to topics about business itself but increasingly also about events and trends anywhere in the world that impinged importantly on business. In 1964, Elliott V. Bell, as editor and publisher, told the staff of his pride in the magazine’s objectivity and ability “to report fairly and accurately a long list of news developments very disagreeable to the business world without alienating our readers or sacrificing our integrity.” Example: coverage of the labor movement that drew respect from both sides.

In style, as exemplified on the

following pages, BUSINESS WEEK covers evolved with the times. After the photograph on the very first issue, the earliest were paintings that, though attractive, bore no specific relationship to a story. Then came covers that were entirely typographical—a potpourri of thoughts about the week, ornamented only by a thermometer representing the BUSINESS WEEK index (a device that survived until 1961).

By far, the most common medium over the years was photography, a pattern that started in 1933 with J.P. Morgan and son facing Congress—with a statement inside that “news photos are strictly in the spirit and tempo” of the magazine.

There has also been profuse use of paintings and illustrations. Among the artists: cartoonist Charles Addams and, for a 1968 story on helicopters, none other than Leonardo da Vinci—with his famous sketch of a whirlybird. More recently, a cover trademark has frequently been a bold blend of type with art or photography to announce a bold idea.

Whatever the style, the covers reflect BUSINESS WEEK’s pioneering coverage of Depression and war, of ever-widening global horizons, of government and technology and economics, of social concerns such as civil rights and the environment. If it’s on the cover, it’s something decision-makers need to know.





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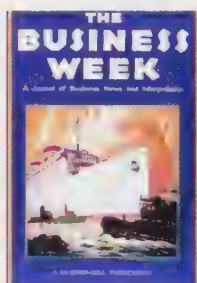
Your electronic business needs hundreds of behind the scenes players to make sure what the customer sees is accurate, easy, understandable and friendly. We'll help you integrate your supply chain, link by link, french fry by french fry. From idea to strategy to implementation. Then to lunch. To learn more about us, call 800-566-9337 or check our website.

1930s

As 1929 waned, BUSINESS WEEK looked ahead to a new decade, warning: "Business outlook—cloudy, continued cold."

The 1930s were a troubled time for executives caught between a search for ways to stimulate lagging business and the New Deal's unprecedented intervention in the economy. War in Europe finally began bringing new life to order books—but business' awkward dance with Washington intensified.

Labor pressures were rising, and there were early reports on how to live with the new fair-trade laws, why and how to use public relations, the consumer movement, industry in the Soviet Union—and a bright new business called television.



Dec. 18, 1929 The market crash left business clinging to hope—by its fingernails.



Mar. 15, 1933 "As the sour jest goes," business is "on holiday along with the banks."



June 10, 1933 J.P. Morgan and son face Congress as Wall Street comes under fire.



July 8, 1933 At the helm is Franklin D. Roosevelt, with economic adviser Norman Davis.



Nov. 18, 1933 With Prohibition repealed, the first barrel of "legal likker" gets weighed.



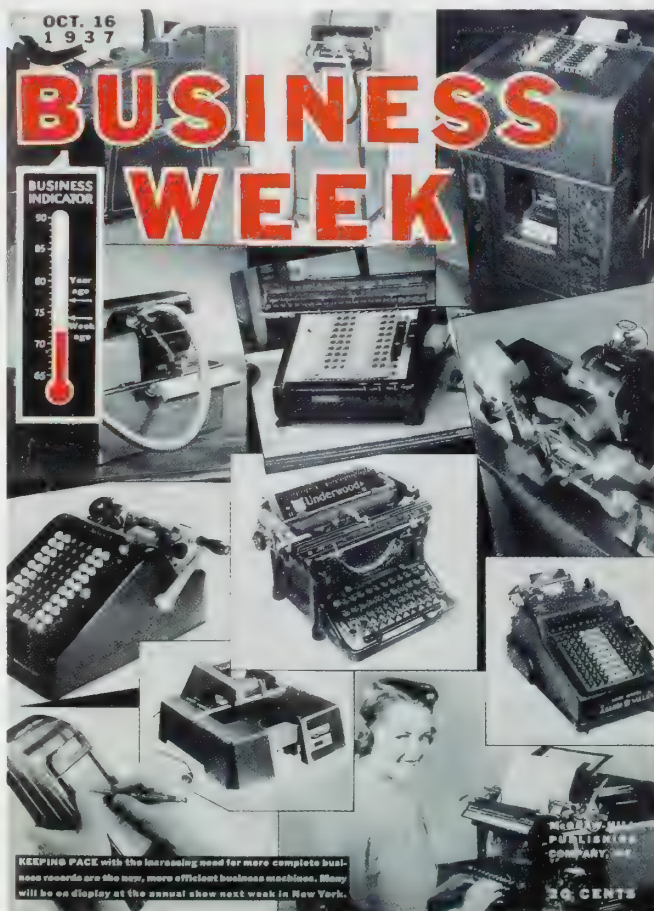
Apr. 7, 1934 In a sign of the times, GM rolls out a lower-priced car, but strike threats loom.



July 7, 1934 As BW "audits" of the New Deal begin, the cover is Treasury's Morgenthau.



June 29, 1935 Bumper crops in Oklahoma make news, but the Dust Bowl lies ahead.



Oct. 16, 1937 The latest in office equipment is on display to meet "the increasing need for more complete business records." Meanwhile, other covers greet innovations such as the new industry of air conditioning, the first Pan American Clippers flying to the Orient, the diesel engine—and movies as a marketing tool.



Sept. 5, 1936 Boulder Dam (later renamed for Hoover) is part of a wave of public works.



July 24, 1937 China stands against Japan's force—the "open door" for trade is closing.



Dec. 31, 1938 TV is in its infancy, but BW tells executives 1939 is "the television year."

1940s

The effort to win World War II—and the peace that followed—dominated the 1940s. Even before Pearl Harbor, the defense effort brought new life to production but also new rules for doing business.

As early as 1943, there were covers on what to do when war contracts ended, and then on the shape of the postwar world: a new monetary system, the division of Germany, the founding of the U.N., and what the Marshall Plan meant to executives.

On the home front, 1947 brought a series of reports on the new American market, region by region—markets that fueled an unprecedented postwar boom.

P.S.: Like most other seers, *BUSINESS WEEK* was wrong about the 1948 election. The Oct. 23 issue had Thomas E. Dewey “all but installed as the 33rd President of the United States.”



Dec. 14, 1940 Europe is already at war, and U.S. industries such as steel hum once more.



May 16, 1942 Women join the production line; a survey shows they often do the job better.



Mar. 20, 1943 War requires controls, and the New Deal presents its “platform” for industry.



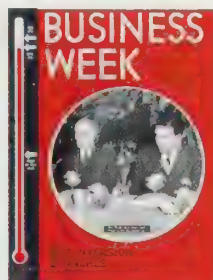
July 8, 1944 A new world monetary system forms at Bretton Woods, with help from Keynes (lower left).



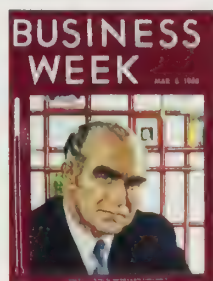
Feb. 17, 1945 FDR, Churchill, and Stalin sketch a postwar map at the Yalta meeting.



Dec. 20, 1941 Only days after Pearl Harbor, troops guard a Boeing plant, labor turns peaceful for wartime, and the magazine stresses what needs to be done for victory.



Oct. 28, 1944 Henry Ford and grandson Henry II plan a postwar car priced to beat Chevy.



Mar. 6, 1948 Henry Luce and his publishing empire mark the 25th year for *Time* magazine.



Oct. 1, 1949 Louis B. Mayer of MGM: Hollywood is concerned about antitrust, high costs, and competition from TV. A bright spot is the popularity of drive-in theaters—no construction bills, and no parking problem either.

Mr. and Mrs. Durk Barnhill

announce

the marriage of their daughter,

Olivia

to

Mr. Brian Kane

on

October 5th, 1999

provided that his big

web-enabled customer relationship management project

is completed on

October 4th

as was indicated in

the original proposal.



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1950s

Consumers ruled the 1950s, and business was there to cater to them. But covers caught some new trends still much in evidence. Two examples: the power of private pension-fund money and an already visible shortfall in Social Security.

An executive-suite woman made her appearance (Hazel Bishop: "The lipstick business can't be kissed off"). As U.S. industry started to move south and west, communism was building an industrial power in China, and Sputnik rocketed the world into the Space Age. In Detroit, the move to smaller cars began (preceded by the ill-fated Edsel).

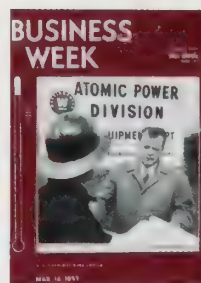
And a 1951 cover pointed out: "A lot of management theories are all wrong."



Nov. 17, 1951 RCA's David Sarnoff (right): An electronics pioneer wrestles with color TV.



Aug. 30, 1952 Jets are still in the future, but airlines rev up for a big boom in travel.



Mar. 14, 1953 Hopes are high as the atom goes to peaceful work at Westinghouse.



June 12, 1954 Instant photography! Edwin Land and his baby, the Polaroid camera.



July 9, 1955 Walt Disney (father of "the mouse that turned to gold") has Disneyland ready to open: "Even fantasy has to diversify." Welcome to a revolution in family entertainment—and travel destinations.



Oct. 1, 1955 For all the talk about automation, business needs "the facts behind the word."



Mar. 10, 1956 BW reports on "the long reach of TV," branded on the cover as a cyclops.



Sept. 15, 1956 Thomas J. Watson Jr. takes over from his father at IBM and fathers "the biggest IBM changes since the punch card," the march into electronic data processing. But computers still fill rooms.



Apr. 27, 1957 Far from replacing people, new machines create a brainpower shortage.



May 18, 1957 "Los Angeles lives the future today" as a pattern other cities will follow.



June 29, 1957 It's the dawn of the European Common Market—and of a new global era.



Aug. 16, 1958 The new American Express credit card gives a big boost to plastic. Charge it!



Sept. 19, 1959 Haloid Xerox' Joseph C. Wilson begins to invade the office-copying market.



Sept. 26, 1959 At Ford, Robert McNamara is a whiz kid. There's a Pentagon in his future.

1960s

Perhaps the biggest news for the future was the research revolution ("The U.S. Invents a New Way to Grow").

Meantime, as U.S. companies went multinational, the war in Vietnam made Americans restless. So did the civil rights struggle, but some companies showed the way to peaceful integration of the workforce. Johnson moved into the White House after the Kennedy assassination.

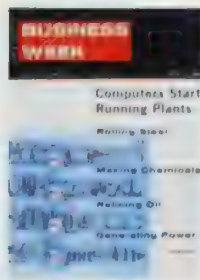
On a 1960 cover, older people already loomed as a new political and economic power.

Computer software began to promise short-cuts, while computers became a huge world market ("Need info? Dial a computer," said a 1967 cover). And U.S. exporters found opportunity in the new Europe.

Airport congestion was worrying the new jet-setters—and for the corporate woman, it was still a difficult climb to the top.



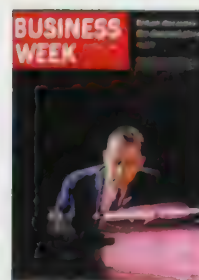
Mar. 26, 1960 The fastest-growing business is semiconductors, as electronics takes off



Nov. 5, 1960 Plants get a new kind of boss: the computer, taking over many routine jobs.



June 16, 1962 The world's biggest building job is the new web of interstate highways.



Aug. 18, 1962 Lasers become a wonder tool for the world, thanks to Charles Townes.



Nov. 3, 1962 The face-off over Cuban missiles ends with a victory for President Kennedy.



Jan. 9, 1965 AT&T's Frederick Kappel sees data transmission in the phone's future.



Mar. 18, 1967 James Ling and LTV exemplify a new kind of company: the conglomerate.



May 27, 1967 Kay Graham, as the power behind *The Washington Post*, builds an empire.



Sept. 23, 1967 Not just a war zone, South Vietnam is an economic disaster area.



Apr. 13, 1968 After Martin Luther King Jr., the civil rights struggle goes into a new phase.



May 31, 1969 Go-go comes to Wall Street via upstarts Donaldson, Lufkin, and Jenrette.



Aug. 19, 1967 Japan's export drive is making waves, and at the same time, many U.S. companies turn into multinationals and go worldwide to compete. The international focus during the 1960s also includes reports on Khrushchev's Russia, the role of U.S. business in the new Europe, and European consumers.

IMPORTANT MEMO

For Mr. Gibbs

Date Monday Time 10:08 ☒ A.M. ☐ P.M.

M Your Mother

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Phone [] _____

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NUMBER

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CAME TO SEE YOU	☐
URGENT!	☐

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RETURNED CALL	☐
WANTS TO SEE YOU	☐
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wants to know why
it was so easy for
her to hack into the
company intranet

Signed _____



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1970s

The stagflation years of the '70s had America spooked. OPEC's impact proved we were truly living in a world economy. Within the U.S., there were also worries about the massive overhang of debt, public and private. BUSINESS WEEK labeled it "The Debt Economy"—and was already warning about a bias against saving.

A takeover binge was changing the structure of Corporate America, just as the trend toward conglomerates had in the '60s. Many managers had to start worrying about a cleaner environment.

The TV networks were shrugging off new competition (including cable), and as "information processing" became a buzzword, the banking industry unveiled something called an ATM.



Oct. 17, 1970 The U.S. economy hits \$1 trillion. Forecast: a resurgence of power for the states.

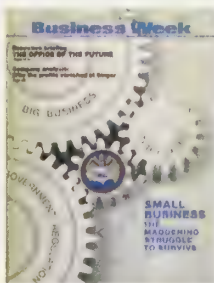
Business Week



Feb. 6, 1971 Clean air and water are a national goal, as Union Carbide learns the hard way.



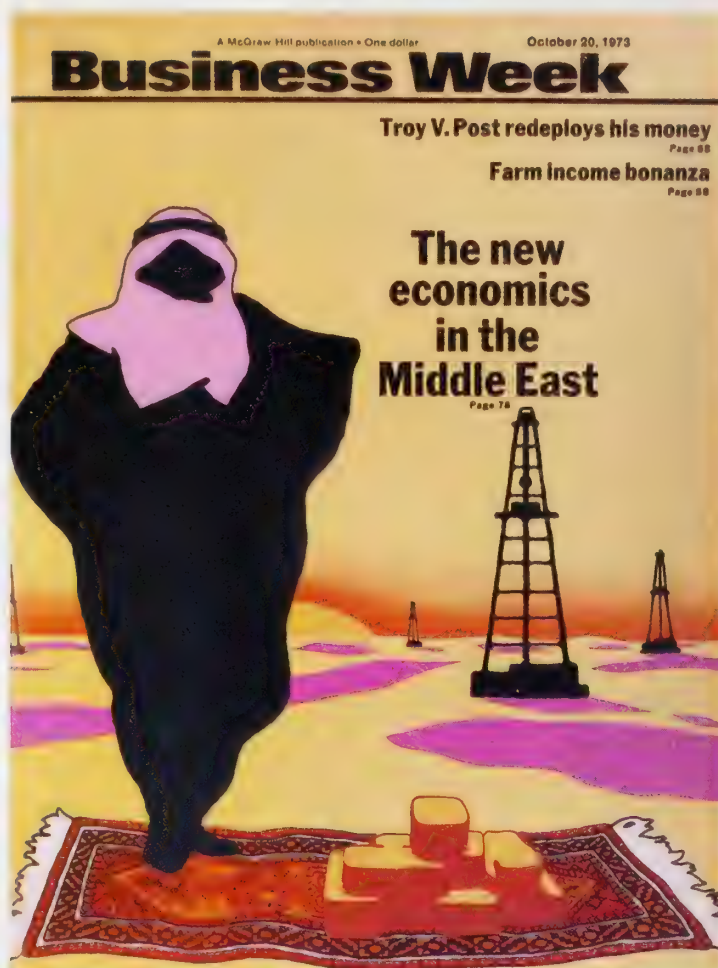
June 9, 1971 Hewlett and Packard (left) aim for premium products and don't haggle on price.



June 30, 1975 It is a "maddening struggle to survive" for small business. Sound familiar?



Aug. 22, 1977 As the space shuttle blasts off, U.S. industry sees a new frontier opening for it.



Oct. 20, 1973 The Arab oil embargo brings "new economics" to the Middle East—as well as jolts to the economies of nations forced to pay higher oil prices. A 1974 special issue reexamines the world economy. At home, the cost of health care creates anxiety, while the corporate board of directors is declared "obsolete unless overhauled."



Nov. 24, 1975 Marion Kellogg of GE illustrates that for women, it's "up the ladder, finally."



May 22, 1978 Deficit spending is responsible for "The Great Government Inflation Machine."



Mar. 12, 1979 The Statue of Liberty weeps for "The Decline of U.S. Power," with defeats in Vietnam, setbacks in Iran and Afghanistan, a trade deficit that won't go away, and the continuing cold war souring the nation's mood.

1980s



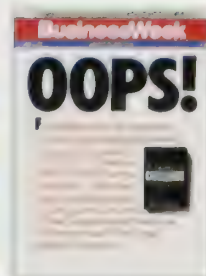
June 16, 1980 The beat goes on: Japan's multinationals cover the world with their investments.



June 30, 1980 The call is for the U.S. economy to reindustrialize to compete in world markets.



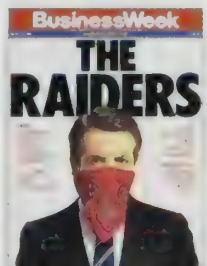
Oct. 27, 1980 "The hard-to-change values that spell success or failure": corporate culture.



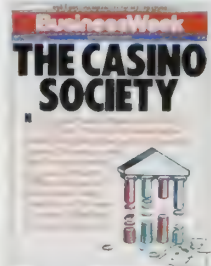
Nov. 5, 1984 Best-run companies? The ones cited by *In Search of Excellence* don't look so good.



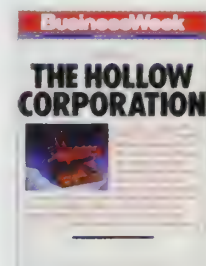
Jan. 14, 1985 China is brewing its own brand of capitalism—and growing as a power in trade.



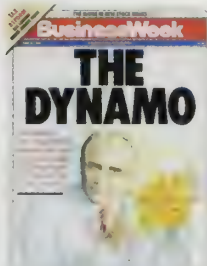
Mar. 4, 1985 Raiders stalk corporate targets and distort management behavior. Good or bad?



Sept. 16, 1985 "Casino Society" defines a system seemingly tilting from investment to speculation.



Mar. 3, 1986 As U.S. producers export much of the work, "The Hollow Corporation" results.



June 30, 1986 Tough Jack Welch sets out to transform GE—so far, so good is the verdict.



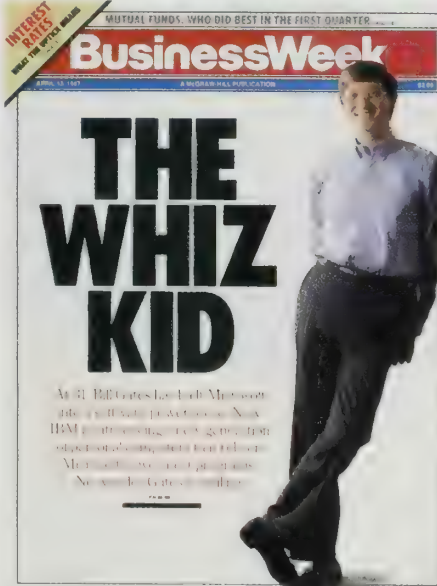
Aug. 11, 1986 A probe raises serious questions about management at Allegheny International.



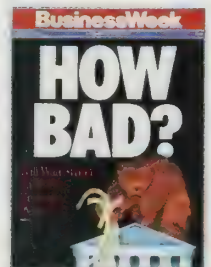
Mar. 23, 1987 Early in the epidemic, BW points to employers finding humane ways to cope.



Sept. 21, 1987 Now anyone can be a Dick Tracy: Cell phones are here, if not yet ubiquitous.



Apr. 13, 1987 Bill Gates at 31 had already built Microsoft into a software powerhouse—and himself into a New Age icon. Now he has IBM's newest PCs on his side. But wait! There are many more chapters to come.



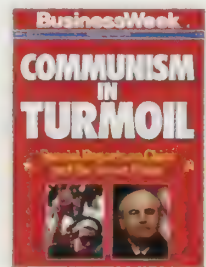
Nov. 2, 1987 Another October crash—will the economy go, too? No, but it was sure a scare.



Sept. 26, 1988 Intel's Andy Grove has a still-more-powerful computer chip ready to release.



Oct. 31, 1988 Forget the '87 crash. S&Ls may be the biggest financial shock since the '30s.



June 5, 1989 It's the beginning of the end of the cold war. Needed: a new kind of world view.

Toyota was in the fast lane, and so was high tech—as Apple, Compaq, and Microsoft joined IBM as household names.

Telecom was "everyone's favorite growth business"—and a 1984 cover asked, "Did it make sense to break up AT&T?"

On the darker side, the stock market took a sickening dive. And there was anxiety about America's ability to compete and even about the quality of its human capital—and the goods it produced. Already in 1983, the trade deficit was our "hidden problem."

It was the era of Mike Milken at Drexel Burnham Lambert, LBOs blazing—and of the executive as celebrity (remember Leona Helmsley?). Biotech generated new hopes. McDonald's was building its own global McWorld. And perhaps the two most important words appeared on a 1985 cover: "Information Power."

A blue ceramic mug with a handle on the right side. The mug features bold, yellow, sans-serif text. The text is arranged in five lines: 'WORLD'S' and 'GREATEST' are the largest, followed by 'GLOBAL INTERNET', 'SUPPLY CHAIN', and 'MANAGEMENT' in smaller sizes, and 'INNOVATOR' at the bottom. The text is slightly shadowed, giving it a 3D appearance on the mug's surface.

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GREATEST**

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1990s

Tim Koogle of Yahoo! and Steve Case of AOL joined Bill Gates in the pantheon of wonder-boy executives. And Lou Gerstner at IBM and Michael Armstrong at AT&T breathed new life into American classics.

Out in the marketplace, baby boomers had to move over as Generations X and Y appeared. Something called "virtual reality" made a cover bow in 1992, as did discount broker Charles Schwab in 1994. "IPO capitalism" blossomed.

But there was also scandal—mob influence on Wall Street and sexual harassment in high places (1996's "Abuse of Power").

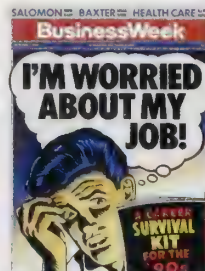
NAFTA came on the scene, controversially, but so did hot money, racing around the world. And the cover question for the decade might have been: "Is Greed Good?"



May 14, 1990 Move over, multinationals. The new style of fast-moving company knows no borders.



May 6, 1991 CEO pay, something BW started watching in 1952, is always a source of debate.



Oct. 7, 1991 Downsizing leads to new anxiety. An earlier question: Is corporate loyalty dead?



July 13, 1992 On the economic evidence, the waves of immigration are a help to the U.S.



Oct. 9, 1995 The boom in technology is making the U.S. the world's most productive economy.



June 3, 1996 Clearly, the public is in love with stocks—and the affair goes on. Will it ever cool?



Feb. 17, 1997 If the road is still slow for corporate women, a few companies show the way.



Apr. 28, 1997 Tiger Woods is a phenomenon on the golf course—and in sports marketing.



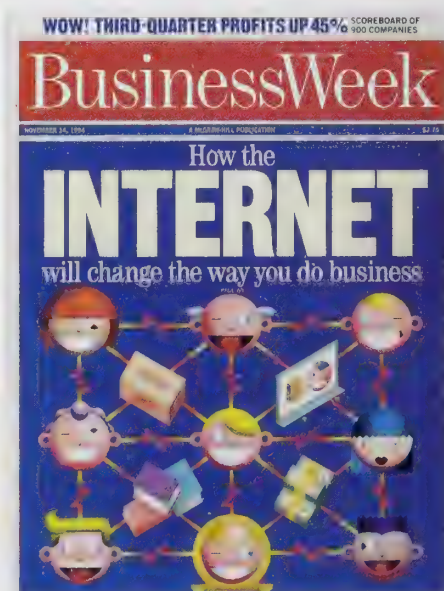
July 14, 1997 If any one man dominates the new economy, it's Alan Greenspan at the Fed.



Jan. 26, 1998 Asian flu has the West sneezing—and fearing worse. What does the doctor order?



Mar. 31, 1997 It's a whole new kind of economy, this "New Business Cycle," fed by the growth of information technology. But there's a fear that a high-tech slowdown could drag down the economy and the market.



Nov. 14, 1994 It's not too soon to declare that the Internet will change how America does business. Later into the '90s, there was a diagnosis of Internet anxiety, but the juggernaut was on an inexorable roll.



Dec. 21, 1998 Ken Chenault's rise to the top at American Express is an American success story.



Aug. 23-30, 1999 It is almost 2000—and time to apply 20th century lessons to the 21st.

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All the World's an Auction Now

THE NET MAKES MARKETS MORE EFFICIENT • BY CHRISTOPHER FARRELL

Nowhere has telecommunications and information technology had a greater impact than on the capital markets. European merchant bankers used carrier pigeon networks in the 18th century to get an edge on their

rivals. Thanks to the telegraph, the ticker, and the telephone, stock trading in 19th century America went from a local business to a national one dominated by Wall Street.

In recent decades, financiers in industrial nations have poured trillions into building proprietary satellite and fiber-optic communications networks that span the globe. Walter Wriston, the former chairman of Citicorp and a leading architect of modern electronic finance, once declared that "in-

formation about money has become almost as important as money itself."

the
internet
age

Well, you ain't seen nothin' yet. The Internet is a revolutionary communications technology driving a global financial transformation. The change is being propelled by a series of simultaneous, self-reinforcing trends. The Web sharply lowers the cost of saving and borrowing; the pool of investment capital soars as more people gain a direct pipeline into the markets; financial inn-

JAPANESE BROKERYAGE The spread of market-based finance is pressuring companies and governments toward greater openness

SQUASH YOUR COMPETITION

NOW

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All in **30 days or less**, without bugging your techies. And all for **just 32 cents a day** per employee in a 500-person company. (You probably spend more on sticky notes.) **Just to survive**, every business will have to start working this way soon. **It's only a matter of time**. But why just survive? **Be first**, and your first 90 days are free. Don't wait. **Call before 11/1/99**, subscribe by the end of the year, and your company gets **90 days for nothing**.

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BE FIRST. OR BE LAST.

The Internet will help investors find and fund profitable ideas bubbling up from university labs or garages

vators exploit new opportunities to create products and markets, which in turn further lowers the cost of capital; and so on in a dynamic dialectic. "The Internet hastens the speed of financial flows and the pace at which the world is getting smaller," says Jeff Bahrenburg, global investment strategist at Merrill Lynch & Co. Adds John J. Sviokla, partner at consulting firm Diamond Technology Partners Inc.: "The Internet will fundamentally change the capital market system."

CLICK HERE FOR CAPITAL. At its most basic level, capitalism will work better than ever, thanks to a more efficient and open financial system. The capital markets are a dazzling social and economic institution for communicating all kinds of data, information, and knowledge through price changes. The more pervasive the financial markets, the more investors will find and fund profitable ideas bubbling up from university labs or garages. At the same time, they'll flee from failed management strategies with the click of a mouse.

"The most significant effect of the Internet on finance is that it will greatly facilitate the efficient matching of borrowers and investors in the global economy," says Mark M. Zandi, chief economist at Regional Financial Associates. Put somewhat differently: "The Internet creates a larger pool of investors for entrepreneurs to tap," says Andrew W. Lo, an economist at Massachusetts Institute of Technology.

There is a rub. Financial crises reminiscent of the Asian contagion of 1998 are likely to keep erupting as the markets flow through more countries and pick up speed. Still, the new world of Internet-driven finance is altogether good news for economic growth. Sure, when markets are this liquid, investors can buy and sell securities on a whim, a rumor, a whisper. But there's an upside. As investors gain confidence that they can easily bail out of their investments, they become more willing to fund innovative companies with an uncertain payoff, such as a biotech startup or an e-commerce grocery store chain.

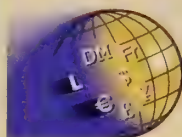
Liquid and open markets also give investors the power to drive change. For instance, when U.S. companies stumbled badly in the 1980s, investors put enormous pressure on managements to restructure their workforces, break down bureaucratic barriers, build an information infrastructure of computers, software, and telecom equipment, and focus on core competencies. In sharp contrast, Japan's financial mandarins continued to pour money into the profitless operations of established customers during the economy's decade-long decline during the 1990s.

Large markets allow investors to design a diversified portfolio so they don't have all their financial eggs in one basket. They also encourage financial engineers to create securities or strategies that protect against big swings in prices. It may

be no coincidence that as average daily trading volume on New York Stock Exchange soared from around 45 million shares in 1980 to nearly 800 million currently, the pool of venture-capital investment in entrepreneurial companies grew from \$698 million in 1980 to nearly \$19 billion last year, according to the National Venture Capital Assn. In roughly the same time, foreign direct investment by U.S. corporations grew from \$215 billion to \$861 billion in 1997, the latest figure available.

An efficient capital market can work wonders for economic development, too. Take the emergence of the U.S. economy in the 19th century. Commentators often attribute the American economy's rapid growth back then to new technology, transportation innovations, and the opening of the West. These same growth drivers were also found in Canada, Mexico, Brazil, Argentina, and other parts of the New World. C

The Internet Will Transform Finance.



MARKETS will be far more liquid and efficient. Trading volumes will explode as retail investors trade at the pennies-per-share rates of today's institutional investors. Markets will be open all the time. Auction markets for initial public offerings

and other traditional investment banking products will spread. Customers will buy directly from issuers.

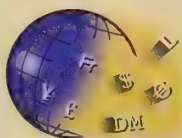
RISK taking and risk management will increase. Financial engineers will tap into the Internet to develop and market sophisticated risk management tools.

ECONOMIC GROWTH will pick up worldwide. A large body of research supports the observation that more efficient capital markets spur technological innovation and economic expansion.

CUSTOMERS will become increasingly knowledgeable about financial products and migrate toward the Internet for transactions, from mortgage loans to 401(k) investments. Computer programs will provide top-notch money-management guidance.

MANAGEMENT will dismantle expensive sales, marketing, and product infrastructures to build a direct pipeline to customers. Some firms will concentrate on distributing financial products while others focus on creating new ones. Partnerships will be commonplace.

...But the Transition Will Be Tumultuous



GOVERNMENTS face enormous pressure to make their operations and their financial institutions more open and transparent. Policymaking autonomy will shrink. Remember the near-global financial meltdown of 1998? Get used to it.

THE ELECTRONIC HERD will suffer bouts of manic depression. Waves of optimism and pessimism will swamp economies.

INDIVIDUALS will make a lot of financial mistakes in the New World of Internet finance as they move up a learning curve.



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the U.S. had a vibrant stock market and an intensely competitive banking system at the time. That financial system paved the way for a huge flow of investment capital from Europe to America. "The U.S. financial system was so good that the assets it generated appealed to foreigners," says Richard Sylla, an economic historian at New York University Stern School of Business. "The U.S. was the most successful emerging market ever."

RAZOR-THIN SPREADS. It may take decades for the Internet to reshape finance around the world. But the signs of more efficient markets already abound. For example, banks can conduct online business with their retail customers at a fraction of the cost of more conventional channels. The banking industry's average cost per transaction is 1¢ on the Internet, vs. \$1.07 at a branch, 54¢ on the phone, and 27¢ at an automated teller machine, according to Merrill Lynch. A recent Microsoft Corp. study estimates that switching the mortgage-origination process to a full-service Web-based electronic business could eliminate two of the three percentage points people currently pay in closing costs. One reason: Lenders would have easier access to data about borrowers. Another is that lenders could quickly bundle the loans together and sell them to investors. Forrester Research Inc. expects online mortgage loans will grow from \$18 billion in 1999 to more than \$91 billion in 2003.

Plenty of investors have already seen the Internet light. Online trading accounted for 37% of all retail trades for the first half of 1999, according to Stephen C. Franco, research analyst at U.S. Bancorp Piper Jaffray, up from 30% in the second half of 1998. That's partly due to cheap commissions—online individuals can get in and out of markets at a razor-thin price. "The trend is toward individuals trading at pennies per share," says Spenser Segal,



SINGAPORE TRADERS: Financial crises are likely to keep erupting as the markets pick up speed

vice-president for interaction strategy at American Express Financial Advisors.

The competitive pressure on financial institutions to bring down costs is relentless. One innovation likely to take hold in the next several years is the emergence of Web-based "aggregators" that will automatically allow individuals to simultaneously monitor all their financial relationships, from their 401(k)s to their mortgage loans to their money-market mutual funds. Somewhat further along are programs that will continuously calculate an individual's net worth by keeping track of all assets and liabilities. These programs will even search the universe of financial institutions for the highest-yielding money-market rates and lowest-interest mortgages or warn when a desired asset allocation is out of balance, says Stuart M. Nick, professor of information technology at MIT.

As investing moves to the Internet, traditional Wall Street firms may soon be joined by some high-tech outfits. "The Internet is changing the face of financial services more rapidly than we imagined," says Sharon Osberg, executive vice president of the online financial services group at Wells Fargo & Co. "And everybody is our competitor, including Amazon.com, Yahoo!, and Intuit."

High-tech competitors aren't just competitors, though. They are catalysts for much of the Internet wealth being created. Internet companies are coming to market every week in Britain, Australia, and Scandinavia. Germany's equity market appears more hospitable than before to small high-tech firms, and there could be plenty of room. A recent study by the Italian Treasury estimated that information technology made up 3.6% of America's gross domestic product, vs. 2.9% in Japan, 2.4% in Germany, and 1.5% in Italy. "As these gaps narrow, the other G-7 countries could experience growth rates in the information technology sector comparable to the U.S.," the study said.

FAST FORWARD

By yearend, **3 million** U.S. households will have **online accounts**, with **\$374 million** in assets. In **2003**, there will be **9.7 million** households with online accounts totaling **\$3 trillion**

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The financial innovations that enhance global risk-taking are vulnerable to abrupt shifts in investor sentiment

rable to the U.S. after 1992," says David Hale, economist at Zurich Financial Services Group.

The end result will be phenomenal investment sums available in the Internet Age. In 1980 the world's stock of equities, bonds, and cash totaled some \$11 trillion; by 2000 these financial assets will total some \$78 trillion, estimates Lowell Bryan, director at McKinsey & Co.

VIRTUAL ROADSHOW. In this environment, financial institutions are understandably shedding their traditional aversion to taking risks—at least with their strategies. Bank of America, the nation's largest bank, bought a 5% stake in E-Loan Inc. by handing over its 80% piece of CarFinance.com to the online mortgage lender. Goldman, Sachs & Co. owns a hefty stake in Wit Capital Corp., which has pioneered distribution of stock to individuals over the Net. Even the New York Stock Exchange plans an initial public offering.

Perhaps the most significant impact the Net will have, however, is in the way new securities are sold. While Wit is reinventing initial public offerings for stock, Lehman Brothers Inc. and other investment banks are using the Net to distribute information to potential investors, conducting "virtual" roadshows for IPOs online. And there is a move toward Internet-based open auction systems, somewhat akin to eBay Inc. W.R. Hambrecht & Co., a California-based investment bank, has auctioned two IPOs on the Net. As a result, the companies were able to raise the maximum amount of capital, rather than settling for a price that was half the closing price at the end of the first day of trading.

As all these trends play out, the fundamental structure of the capital markets will be more consistent. There have long been two competing models of financial organization: the Anglo-American free-wheeling, capital market financial system and the Continental bank-dominated system. The bank system works well when information about business enterprises is costly to acquire. Now that is changing. "If the cost of acquiring and disseminating information falls, then the advantage of the German model falls, too," says V.V. Chari, an economist at the University of Minnesota. "Decentralized markets with widely held ownership is the way the world will work."

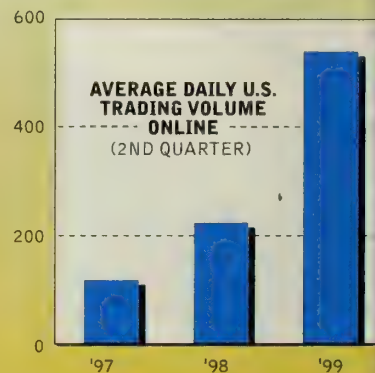
The spread of market-based finance is pressuring companies and governments toward greater openness and transparency. The demand for information by global investors is nearly insatiable in a market-dominated system. The financial world is increasingly hostile to closed-minded bureaucracies, which can be troubling to both companies and insular governments. "As we all become more accustomed to information available to us immediately, we all will expect a very fast response, too, especially shareholders," says Patrick McCormick, partner with Arthur Andersen's finance solutions business team.

Governments may be the slowest to come to terms with the new world, though. The same technologies and financial innovations that promote the trade in goods and services across borders and enhance global risk-taking are also markedly vulnerable to abrupt shifts in investor sentiment. Investors, panicked by the devaluation of the Thai baht in July, 1997, set off a terrifying series of currency, bank and stock market crashes in the emerging markets of Asia, Latin America, and Russia by tapping a few keys on their computers.

PANIC BUTTON. Financial engineers and their powerful computers at hedge fund Long-Term Capital Management lost billions and nearly took down the global financial system when their highly leveraged bets went bad last summer. "The widening access to information on the Internet and the ability to act quickly on that information could lead to panics and crises," says William N. Goetzmann, financial economist at MIT. But the Net will resist the traditional impulse

ONLINE TRADING VOLUME SOARING

Online trading is running at **37%** of all retail trades; it's expected to hit **about 50%** by the end of next year.



DATA: US BANCORP PIPER JAFFRAY

▲ HUNDREDS OF THOUSANDS OF SHARES

countries to seal off their borders to the free flow of capital. Government officials around the world will be forced to recognize Federal Reserve Board Chairman Alan Greenspan's tongue-in-cheek observation that "our productivity to create wealth has improved measurably in recent years."

Nevertheless, the global financial markets are the marrow of the world economy. Yes, fortunes will be made and lost seemingly overnight as Internet-based finance becomes the dominant force in the world economy. Yet the real significance of finance is not—and never has been—money flow. The more individuals trade, the more innovative financial securities are created, and the more information becomes easily available, the better the capital markets work at their fundamental task. They transmit valuable knowledge about everything from how to organize a productive factory to government policies that encourage growth. When it comes to finance, the Internet is a force for bringing everyone closer to hope for a better material life.



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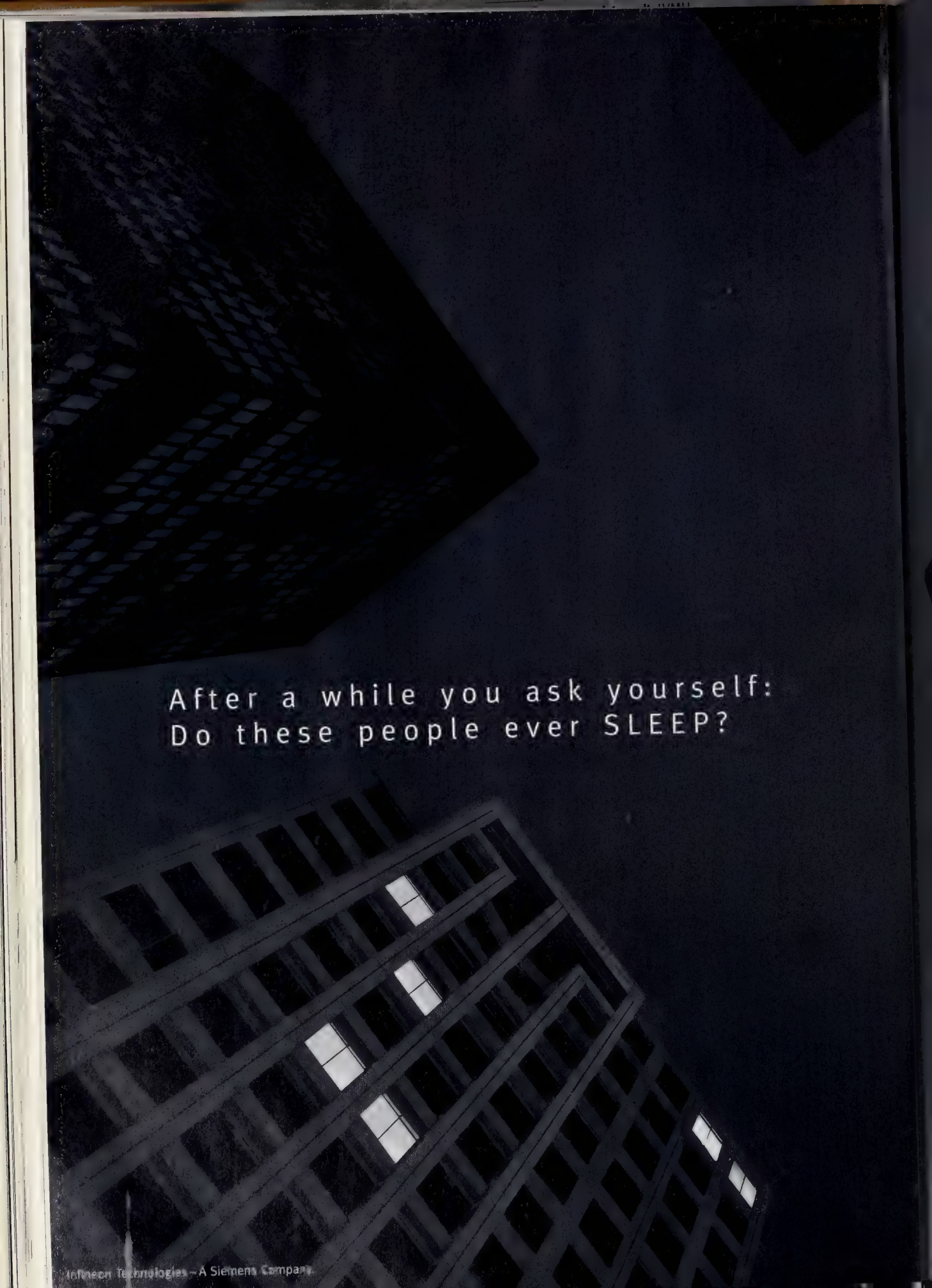
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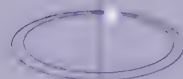
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WILL HEAVY-HANDED SHANGHAI HOLD BACK NETREPRENEURS? • BY BRUCE EINHORN

It's the end of a trying day for Phil Ren. After hours spent in meetings devising strategies to attract foreign venture capitalists, the tall, bony 23-year-old is in a local restaurant picking at his dinner. He takes another drag on another

cigarette, downs a decongestant for an annoying cold, and confides that despite the apparent success of his two-year-old startup, Shanghai SOIM Online Publishing Co., he is worried about the future. "I'm afraid," he tells me repeatedly.

At first, it's easy to see why. Ren is trying to build an Internet business in Shanghai without the support of the local

government, which is determined to control the growth of the city's fledgling Net economy. SOIM, one of the biggest hits of China's Internet industry, sends out electronic Chinese-language news, sports, financial, and lifestyle magazines to subscribers nationwide. And Ren has shunned Shanghai government efforts to buy a piece of it.



the E-Revolution

Instead, Ren and his 30-year-old partner, Ray Chen, are working a business model uniquely suited to China, where high costs make extensive Net surfing too expensive for many Chinese. Visitors to SOIM's Web site sign up for e-zine subscriptions and receive delivery by e-mail, allowing them to read articles cheaply offline. The formula is working, with SOIM (the initials stand for Shanghai Online Information Mailing lists) winning over 400,000 subscribers—10% of China's total online population.

FEEL ARMS. Now, SOIM wants to move beyond the startup phase, with products designed to appeal to more sophisticated Net surfers. That means hiring a slew of people: "We need a Web designer, a service designer, a programmer, marketers," says Ren wearily. He also must find new investors and figure out how to manage it all. "I know a lot about the Internet," he says, "but I know little about management."

As if all of that didn't give him reason enough to worry, Ren must convince prospective investors that they needn't fret about the government's attempts to control the Net—possibly the hardest task of all. Just a few days after I met with Ren, the top telecoms bureaucrat in Beijing startled the Chinese Internet community by denouncing all foreign investment in online content providers.

As China's government reaches its steel arms around the explosive growth of the Internet, entrepreneurs like Ren are feeling the pressure. It doesn't make Ren's life any easier that he's unwilling to accept investment from the most logical source—Shanghai Online, the city government's top Internet service and content provider. Other Shanghai companies welcome the *guanxi*, or government connections, that Shanghai Online offers, but Ren refuses. "Do you think the government can give you valuable things?" he wonders incredulously. "We need the

the
internet
age



style of professionals, of pioneers. Not of the government."

Can a Communist government micromanage the Internet revolution? Shanghai's leaders are betting, despite the misgivings of entrepreneurs such as Phil Ren, that they can. They want to make their city, already China's financial and manufacturing center, the country's e-commerce hub. The "information port," as they call it, would be home to elite Internet companies, plugged-in manufacturers, digital schools, and online hospitals and museums. Even the Shanghai zoo is getting in on the act, conducting an online contest to name its new giant panda. The winning moniker: Le Le.

It's all part of a grand vision by city planners

GUANXI, GO HOME: Phil Ren is trying to attract foreign investment to his Internet startup—and bypass the government entirely

to make Shanghai an e-rival to such Asian powers as Hong Kong and Singapore. I've traveled to Shanghai to see whether they can pull it off—and to see just how the impact of the Internet in a developing economy differs from its impact in U.S. The Net revolution faces strong resistance in places like Shanghai, where few people own computers, primitive infrastructure slows Net traffic to a crawl, and entrepreneurs must operate under an unpredictable authoritarian government. I wonder whether the Communist regime

is willing to allow the kind of unruly growth characteristic of the Net in the West. After all, Shanghai was the site of China's most notorious case of Net persecution: the speedy trial and conviction of software engineer Li Hai, sentenced to two years in jail last winter for sending Chinese e-mail addresses to a pro-democracy group overseas.

BEIJING BUZZ. Moreover, when it comes to e-businesses, Shanghai is home to China's most interventionist government. Most of Shanghai's popular sites, such as financial information leader Stockstar.com, are government-backed, while Chinese Net companies with the most buzz



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- 2 HOTCINEMA.COM
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WEB MASTER? Cheung hopes to offer WebTV service by October, using Western and Asian set-top boxes

its policy in Beijing, back in Shanghai the question remains: how does a place that doesn't trust information, that wants to keep its grip on e-businesses, hope to become an Internet hub?

Easy, says Fan Xipin, vice-director of the city information technology planning office. Although many critics accuse the state of Net censorship, Fan says, "the government doesn't create obstacles to prevent people from getting access to the Internet." He insists that Shanghai is working very hard to ensure that the city is on the cutting edge of China's e-commerce revolution. By yearend, the city government will have helped introduce a raft of new services, including business-to-business sites and consumer-focused e-commerce.

Shanghai is hardly an Internet hotbed now, but there are plenty of indications that change is coming. Take the surge in the number of Shanghai residents online. At the end of 1998, the city of 12 million residents had just 120,000 Internet accounts, according to Shanghai Online. Six months later, there were 200,000. By yearend, estimates Zhang Linde, general manager of Shanghai Information Industry Co., Shanghai Online's parent, the number should hit 400,000, and the city has launched an effort to boost its capacity to 800,000. Several hundred thousand additional users get Shanghai Online's free intranet, a proprietary Chinese-language service that does not provide access to the Web. In October,

Shanghai is launching a broadband network that will allow users to take advantage of the latest applications, such as video-streaming technology.

Businesses are waking up to the potential of the Internet. One morning, I meet Xiao Hongfa, a gruff 40-year-old manager for state-owned China Taixing Group, which makes heavy machinery from its factory in Jiangsu province, just outside Shanghai. Five months ago, Xiao began using a local version of Internet telephony operator Net2Phone Inc.

based not in Shanghai but in more freewheeling Beijing. And e-businesses throughout the country fear more central control after startling comments by Wu Jichuan, the telecoms minister, who declared on Sept. 14 that foreigners cannot invest in Chinese Internet content providers.

It's unclear whether Wu has the authority to institute that kind of ban. He might just be trying to make a last-minute attempt to protect the state companies threatened by upstarts in the private sector. But, as the leadership sorts out



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WHAT AM I BID? Bo Shao, founder of an eBay-style auction site, doesn't want state aid

make his international calls. "I save 90%," he marvels. Xiao also is trying to find new customers over the Net, though he admits it's an uphill slog. "We have received lots of e-mails, but no one has bought from us," he says. The Internet "is not so successful yet because people in China don't have so many computers."

Even small companies are trying to go online. In August, Ni Wei, a 31-year-old who helps run Shanghai Lin Gao Co., a family-owned exporter of silk and linen, started using an online service to reach potential U.S. customers. The tiny firm, with just \$800,000 in sales and a single computer, can't afford to send a representative to U.S. trade shows—but the Internet still offers access, at a far cheaper cost. "For a company whose finances are not so strong, we can save money and also get our aim," says Ni.

"INFORMATION MAFIA." As Net usage grows, the biggest beneficiary should be Shanghai Online, the city's Internet giant. Its dominance is nearly complete, with over 90% of locals using its Internet service provider. Also an Internet content provider, it offers 170 Web sites. "Shanghai Online is like the information mafia," explains Duncan Clark, the founding partner of Internet and telecoms consulting group BDA China. "That's a bit crushing for private enterprise." Clark, a 31-year-old Englishman who splits his time between Shanghai and Beijing, is a former investment banker for Morgan Stanley

who grew weary of Beijing's oppressive bureaucratic culture. He sees a positive to Shanghai's efforts at control: "Here, government is smarter and more organized. You have people who understand the technology. In other places, they would like to be interventionist, but they don't know how."

That techno-savvy makes for an uneasy alliance for the majority of Shanghai's early Net entrepreneurs. For them, survival has required staying on good terms with Shanghai's government. Gao Limin, deputy manager of StockStar.com, counts on Shanghai Online and a city-owned venture-capital fund to help smooth over problems with China's state-owned banks and brokerages. "You have to have government support," says Gao, an intense 32-year-old, oblivious to the onslaught of bicycles and motorcycles whizzing past him on Caoxi North Road on this late afternoon. We're walking to the China Telecom building that hosts the 54 servers of StockStar, which has 380,000 users, up from 180,000 at the start of the year. Gao ignores the rush-hour traffic, intent on explaining why Shanghai's Internet scene shouldn't take a back seat to Beijing's. "They get the publicity," he concedes, "but we've spent more time on infrastructure-building."

StockStar's government backing has been a plus, but he admits that there are limits to how far the *guanxi* can take you. "If the government ownership is too big, then you

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too slow," he says. He just put the finishing touches on a deal that lowers Shanghai Online's stake in the company, with Gao's privately-owned company taking majority control.

Those who don't have Shanghai Online as a stakeholder pay a price. Jeff Huang, 38, is managing director of Shanghai ZS Information Co., a privately owned company that runs Hotcinema.com. The Web site offers online reservations for 19 Shanghai cinemas. Rather than invest in his own servers, Huang pays a Web-hosting fee to Shanghai Online, which until recently charged him by the number of users. "The more customers I had, the more I paid," says Huang. Now, Shanghai Online has changed its policy, charging Huang a fixed monthly fee of \$120. That's giving him some breathing room, and he

says that Hotcinema will grow from its current 4,000 registered users to 10,000 by yearend.

Cutting prices doesn't come easy to Shanghai Online and other subsidiaries of state-owned China Telecom. Over the past year, everyone from ordinary Net surfers to Premier Zhu Rongji has gripped about the high costs of China Telecom's Internet access—outrage that led the quasi-monopoly to slash rates. As a result, Shanghai Information Industry's Zhang Linde says his ISP now charges just \$1 an hour, compared with \$5 last year. With Zhu pushing to reform the telecom industry, rates are likely to fall

HAMPERED:

Bureaucrats are hindering Zhou's plans to put her museum's collection online

ther. "In the field of ISPs, we are all losing money," says Zhang, who won't reveal the extent of the losses, "but we can't not do it."

With the ISP business so bad, Zhang is pushing Shanghai Online into the Internet content industry. But the move, too, Shanghai's dominant player finds it tough going. Shanghai Online is No. 1 in its home

market, but aspires to be a national player. Outside the country, though, its reputation suffers: A recent nationwide survey of the most popular Web sites showed it falling to No. 9, from its previous No. 4. Zhang blames other ISPs that don't provide easy access to Shanghai Online's offerings, and he looks enviously at Beijing-based portals, such as Netease.com and Sohu.com. His solution? Open an office in Beijing. The Shanghai government may not like it, but, says Zhang, "if you don't go to Beijing, you can't be on a national level."

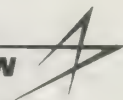
When it comes to finance, Shanghai is second to no Chinese city, and online stock trading is a logical industry for it to dominate. But China's heavy-handed regulators are stunting the growth of the business. Early this year, government



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LOCKHEED MARTIN



PRICE BREAK: The Shanghai government gave Huang (right) a fixed price to host his movie-ticket ordering site

owned Hong Kong Macao International Trust & Investment Co., usually called Gangao Securities, started offering customers online trading services. It now has about 1,000 online clients whose trading volume accounts for roughly one-tenth of Gangao's monthly turnover of \$180 million.

Problem is, Beijing says China's brokerages must all charge the same commission. That makes it impossible for Gangao to offer discounts to online users. Since online customers must also foot the bill for Internet access, says Xu Dong, manager of the company's remote-services department, "to use the Internet, you have to pay more." As a result, online trading is mostly for people who live far from a brokerage office.



PANDA TO THE MASSES: The Shanghai zoo's Le Le was named in an online contest

I hear a similar story at the Shanghai Museum, a stunning building that opened a few years ago and houses one of the best collections of Chinese bronzes anywhere. Over tea in the museum's elegant coffee shop, associate curator Zhou Yanqun tells me the museum's galleries have space to show 120,000 items, but that's just one-tenth of its holdings. The Internet can help the museum show the public more of its pieces, says Zhou, and also improve the museum's reputation with art history scholars worldwide. She envisions the museum hosting a symposium and broadcasting it live over the Internet. Zhou says a philanthropist in the U.S., the widow of a late

media titan, is ready to donate the necessary computer.

But for now, all plans are on hold. China's culture mandarins are worried about what might happen if the image of national treasures end up on the Web. The bureaucrats are demanding that no museum put its items online until UNESCO comes up with a system to protect copyrights. "Museums have to be very careful," sighs Zhou. "It takes time."

While bureaucrats fiddle, technological breakthroughs are making the Net more and more accessible. During a trip to China early this year, Microsoft CEO William H. Gates III announced that his company was working to develop a Chinese language system to provide Internet access via television. That project, code-named Venus, has yet to come out with its first product. But that's not stopping Lawrence Cheung, 31-year-old CEO of Shanghai WebTV Corp. Cheung, a Hong Kong native, predicts that "a stable product will come very soon" and is launching his service in October, using set-top boxes from Asian and Western suppliers. Since most Shanghai residents have TVs but few own computers, Cheung says it should be easy for him to get 200,000 subscribers by 2000.

SHAKY HOLD. As the Internet starts to take off in Shanghai, the government's hold is becoming more tenuous. Startups are sprouting all over the city. Since August, two companies have begun offering online bidding, eBay-style. A couple of portals are launching, too. With foreign venture capitalists showing great interest in the Chinese Internet, the auction sites have been shunning state aid. "Government investment limits your growth," explains Bo Y. Shao, a 26-year-old Harvard University graduate and founder of auction site Eanet.com. "It inhibits outside investors from coming in."

Chinese bureaucrats, though, have more ways to interfere than direct investment. A few days after the telecom minister made his surprise announcement denouncing foreign investment in Internet content providers, I give Phil Ren a call. The SOIM co-founder is in Beijing, where he has just opened a small marketing office. Ren's not sure what to make of it. "There is not any other clear information," says, but adds the news could complicate his efforts to get venture-capital funding. It seems the battle to control the Internet in Shanghai is far from over.

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Activists Without Borders

THE NET IS CHANGING THE RULES OF POWER POLITICS • BY PETE ENGARDIO

As a military threat, the Zapatista National Liberation Army has never really amounted to much. Within a week after launching an uprising on New Year's Day in 1994, the Mayan Indian guerrillas agreed to a cease-fire.

They have been holed up in the mountainous jungles of southern Mexico ever since.

But in cyberspace, the Zapatistas are more effective than ever. On dozens of Web sites set up by supporters around the world, rebel leader Subcomandante Marcos can still be seen in his ski mask, puffing a pipe, pressing his demands that Mexico City honor its 1996 promise to give indigenous peoples in the state of Chiapas self-rule. Using the Internet, the Zapatistas have gotten foreign sympathizers to picket Mexican consulates, raised hundreds of thousands of dollars in donations, and helped spearhead huge conventions of grassroots groups from Latin America, Europe, and North America who oppose free-market reforms.

It's an avenue that activists of all stripes are fast discov-

the
internet
age



FALUN GONG FOLLOWERS: The secretive religious sect used the Internet to spread its message.

ering. By mastering the weaponry of the Web, everyone from clandestine Beijing dissidents to high-powered Washington lobbyists are finding that the Internet is an extraordinary tool for mobilizing support, raising money, and exerting influence. In the Internet Age, it's possible for a handful of Web-savvy activists to exert pressure on policymakers working out of their homes. The result may be a fundamental transformation of the nature of politics.

In the 20th century, the game of power typically entailed moneyed special-interest groups who plied the corridors of Capitol Hill, cultivated Japanese bureaucrats with lavish entertaining, or mobilized rallies in Germany. But the Net has ushered in a new social phenomenon: virtual organizations. These are unstructured ad hoc clusters of people



China

WEB USE Has soared fivefold, to 4 million, in just two years, with 27 million users expected by 2001.

POLITICAL IMPACT Groups like Falun Gong have surprised police by organizing rallies through the Web. Citizens can read uncensored foreign news and communicate with dissidents through foreign-based sites. Academics exchange views they would not publish in mass media.

POPULAR SITES
falundafa.com, tibet.com, freechina.net, hrichina.org, geocities.com/SiliconValley/Bay/5598

Just because cyberactivism is practically invisible doesn't mean it can't generate swift and unexpected shifts. Indonesian President Suharto found this out last May, when student pro-democracy leaders who were linked by the Web mounted mass protests that eroded his authority and sped his ouster. Beijing found out last April, when 10,000 members of the secretive Falun Gong religious sect suddenly showed up for a protest outside the government leadership compound. Residents of many U.S. cities have been alarmed by neo-Nazi groups who, with little notice, have staged rallies and rock concerts organized over the Web.

As technologies advance

and Net use spreads, the impact will be profound. To Web-wise pols ranging from Democratic Presidential candidate Bill Bradley to the religious right, the development poses new possibilities for fund-raising. But for rulers seeking to maintain social order or political control, it can be as threatening as a tornado sweeping down from an Oklahoma sky.

Not surprisingly, leaders from Washington to Beijing to Riyadh are struggling with ways to limit the tools that have empowered cyberactivists. The central issues: Should governments be able to block individuals' access to materials deemed inappropriate, such as hate sites posted by racist groups? Should Web users be barred from using advanced encryption software that makes it difficult for governments to eavesdrop on digital communications?

Advocates of Web restrictions are well intentioned. But

news of a protest rally—circumventing Beijing's clampdown on the group's activities

who perhaps never met. The only thing they share is a common passion—a concern for environmental issues, an ethnic identity, or simply a sense of struggle. But they can be rapidly mobilized for political action. "It's a completely new power structure," says Democratic consultant Jennifer Laszlo. "The new people with power are those with credibility and an e-mail list. You have no idea who they are, where they are, what color they are. It takes away a lot of power from oligarchies."

ACTRY. Almost out of the ether, virtual organizations materialize to put global pressure on the owner of a Nicaraguan factory who is locked in a dispute with his workers. Or they mount a nationwide outcry to force lawmakers to investigate the FBI assault on the Branch Davidian compound in Waco, Tex., or to kill controversial legislation.



HIGH-TECH CAMPAIGNER: Through his Web site, Bill Bradley offers kits showing volunteers how to organize neighborhood groups and raise money

these limits cut in many directions. U.S. law enforcement agencies want to curb cryptography software, for example, because otherwise they may be unable to penetrate terrorist or narcotics rings. But the lack of encryption makes it easier for police states to round up political opponents who communicate over the Web.

Another example: software that blocks access to sites that parents think are inappropriate for children, such as those that are pornographic or violent. But authoritarian governments could use mandatory filters to censor the Net. That's why groups from the American Civil Liberties Union to the conservative Free Congress Foundation think Big Brother should butt out.

OFFSHORE SERVERS. So far, cyberactivists have found ways around every hurdle governments have put up. Take China. While police have hunted down and jailed dissident Webmasters, new sites proliferate. With threats to revoke licenses of Internet service providers operating in China, Beijing has gotten the industry to self-censor by blocking sites with content that departs from the party line. But skilled surfers can gain access to anything they want by tapping into offshore servers and dissident sites.

Governments also can ban the import of

United States

WEB USE Percentage of Americans online has risen from 14% to 41% in three years. Some 23% of new users earn less than \$30,000 annually and 40% did not attend college.

POLITICAL IMPACT Special interest groups now mobilize mass letter-writing campaigns to policymakers quickly and cheaply. For political candidates, the Web is becoming a powerful tool for fund-raising and grassroots organizing.

POPULAR SITES aclu.com, billbradley.com, steveforbes.com, politicsonline.com, christian-coalition.org, opensecrets.org

views from the 440-square-foot Belgrade apartment of signer Sinisa Rogic. With money raised through rock concerts and rallies, the staff plans to launch a service to send how news to subscribers. "Without the Internet, we would even be in this country anymore," says Rogic.

As Malaysia is discovering, curbing c

encryption software strong enough to confound the supercomputers that the state uses to monitor electronic traffic. But such software is easy to smuggle in—and can be downloaded from some foreign sites. Organizations such as Human Rights Watch even offer training to nongovernmental organizations on how to use such encryption programs. Pretty Good Privacy (PGP), even though it was banned by the U.S. government in Washington until recently banned its export. "Once programs like PGP get into the mass market, traffic will be much more difficult to crack," says Human Rights Watch's Internet expert Jagdish Parikh. Eventually, he predicts, upgrading computer surveillance systems will become too costly for many governments.

The war in Kosovo revealed how difficult the Web has made it to stifle dissent. After the Serbian army invaded in March, it stormed the offices of *Koha Ditore*, the leading Kosovo nationalist newspaper. But so the paper was back in operation—its Web site run from Macedonia.

OUTAGES. The same thing happened when the government seized the Belgrade studio of B92, a Serbian independent radio station, as well as computer gear used for the station's Internet service. Within a month, the station was reconfigured as www.freeb92.org, hosted by xs4all, an ISP in Amsterdam that helps alternative media. Correspondents dispatched audio clips and text articles on the war over the Net—a job made more difficult when NATO bombs knocked out electricity. Now that security has relaxed, Free B92—run by the original B92 staffers—news, music, and cultural information

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sent is especially hard once a nation's middle class embraces computers. After a 1998 feud over how to deal with the country's financial crisis, Prime Minister Mohamad Mahathir fired his reformist deputy, Anwar Ibrahim, and jailed him on disputed corruption and sodomy charges. Since then, the government has clamped down on the press. Street demonstrations of the pro-Anwar *reformasi*—reform—movement have become rare. But thanks to the Net, which has 1.2 million users in Malaysia, "*reformasi* has moved out of the streets and into the homes," says a former Anwar aide.

Authorities have rounded up several suspected dissident Webmasters. But Malaysians still can visit some 80 pro-Anwar sites, operated in the U.S. and Britain. "What is making the difference is that ordinary people are now coming to this medium," says Parikh of Human Rights Watch. And Mahathir can't crack down too much, because his government has made development of Internet commerce a cornerstone of its industrial policy.

In the more freewheeling West, the Web is revolutionizing democracy itself. And nowhere is the technology and art of cyberactivism more developed than in the U.S. Three years ago, Republican Presidential candidate Bob Dole tried—with little success—to get voters to check out his Web site. Today, 45% of likely Republican primary voters with a computer say the Internet is "the place they go for information" about politics, according to Steve Forbes's campaign manager, Bill Dal Col. Predicts Internet political consultant Phil Noble: "In time, the whole political communications process will be based on the Web."

INSTANT CLIPS. Forbes and Bradley have developed the most sophisticated Web campaigns. Both candidates count tech directors in their inner circle of advisers. Dal Col exchanges e-mail 10 times daily with Forbes's Web guru Richard A. Segal Jr. in Cincinnati. On the hustings, staff tote digital cameras and satellite transmission equipment so Forbes can feed his site with a constant flow of video clips, online chats, and 90-second commentaries for radio stations. And his campaign has organized volunteers—30,000 of whom signed up online without being recruited—into "cyberelection districts." Instead of turning out voters in their geographical areas, these volunteers design their own district—friends, hobbyists, or ideological soulmates—from anywhere.

Meanwhile, Bradley's site offers "community involvement kits" for volunteers. These manuals show boosters how to organize their neighborhoods, raise money, write impassioned letters to the editors of local newspapers, monitor local talk radio shows, and even download voter registration forms. Until this year, the Web wasn't used for presidential fund-raising in the U.S. because credit-card transactions weren't eli-



CARRYING ON: When the Belgrade government seized B92, a Serbian dissident radio station, it was reconfigured as a Web site

Serbia/Kosovo

WEB USAGE Gaining in popularity, but Western bans on computer equipment sales have limited users to 50,000 in Serbia. Activists get Web messages to wider audiences by fax.

POLITICAL IMPACT By shifting to the Web, opposition media such as Serbian radio station B92 and Kosovar newspapers stayed in operation after government seized their facilities. Human-rights monitors used the Web to spread news of atrocities against Albanians.

POPULAR SITES freeb92.net, kohaditore.com, hrw.org, freeserbia.net, mup.sr.gov.yu

gible for federal matching funds. But after Bradley challenged rule, the Federal Election Commission reversed the policy last year. So far, Bradley has raised \$607,000 from 3,700 donors on Web.

Since it is so cheap and widespread, the Web is valuable to special interest groups that need to make their money go a long way. Using the old media of telephones, faxes, and mail, it used to require months and scads of money to get a few thousand people to write letters to Congress. Using the Net, groups can generate hundreds of thousands of messages within weeks. A single click on a mouse enable voters to dash off personalized faxes—to urge Washington lawmakers to vote against gay rights

to urge a local school board to stop teaching evolution.

Just ask Pam Fielding, co-founder of cyberlobby firm e-vocates. She helped lead a National Education Assn. drive to save a federal requirement that Internet service providers give schools a discount rate after congressional Republicans moved to end it. Lawmakers and the Federal Communications Commission were soon swamped with 22,000 messages. "Every message was a personal e-mail from a mom, dad, a businessperson, a teacher, or a school administrator," says Fielding. "I was convinced at that moment that the Internet was the future of democracy." A similar blitz by civil-liberties groups persuaded the Federal Deposit Ins-

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ance Corp. to shelve an effort to loosen its customer privacy rules. The agency received 205,000 e-mail messages protesting the changes—compared with fewer than 100 in favor.

Because lobbying groups aren't as prevalent in democracies outside the U.S., the Web hasn't yet emerged as a key weapon. Britain's Labor Party has a home page, for example, but "it was only during the last election that the telephone became more important in the U.K. than knocking on doors," says a party spokesman. And in Japan, where the government strictly regulates campaign activity—down to the size of portraits on a poster—candidates can't post new items on their Web pages once campaign season officially begins.

CYBERVOTERS. The Net is making inroads. Japanese legislator Yukio Edano is a leading *shinjinrui*, or new-generation politician. An activist lawyer elected to the Diet in 1993 and now a member of the opposition Democratic Party of Japan, Edano, 35, logs on often and carries a handheld PC in his briefcase. He uses his home page to explain his positions on pending bills—once unheard-of in Japan, where legislators have long brokered votes in secret. His online chats attract only a few dozen voters. But Edano figures it's a start. "Japan's silent majority will finally be able to make its opinion known," he says.

As Edano searches for cybervoters in Japan, special interest groups using the Web have found audiences far beyond national borders. Because the medium is truly global, their pleas are "generating very tightly knit communities that are not geographically contiguous," observes Juan Enriquez, a Harvard University expert on Latin America.

Japan

WEB USAGE Has grown from 1.5 million people to 17 million in four years. Some 11% of households and 80% of large corporations are online.

POLITICAL IMPACT New-generation politicians such as Yukio Edano use the Web to discuss issues with their constituents. Younger bureaucrats prefer dealing with lobbyists by e-mail rather than socializing. More citizens are making their voices heard through online polls.

POPULAR SITES edano.gr.jp, behindthescreen.com



LOGGING ON: Edano makes good use of a PC in his briefcase

Mexico

WEB USAGE Some 1 million people have Web accounts, not including many who get free access. Latin American users are expected to grow to 19 million by 2003.

POLITICAL IMPACT The Zapatistas have kept their movement alive. Labor groups now get global support.

POPULAR SITES ezln.org, corpwatch.org/trac, nrdc.org/camp/cagray.html



GUERRILLA: Holed up since 1994, Zapatista Marcos keeps up with backers over the Net

Labor and environmental groups have been especially adept at expanding local disputes into global causes. Greenpeace has an e-mail list of 5,000 activists who join protests over everything from polyvinyl chloride in Japanese toy plutonium shipments in Britain. Labor disputes in *maquila* assembly plants along the U.S.-Mexico border now routinely elicit e-mail campaigns targeting multinationals. Government agencies run by such groups as the Campaign Labor Rights in Washington and San Francisco's Transnational Resources & Action Center (TRAC). "We're in the process of building grassroots globalization," says TRAC Director Joshua Karliner.

When these grassroots movements jell into challenges, governments often tremble. They can seize computers or Web access, as when Beijing temporarily shut e-mail service at domestic Internet service companies in a clampdown on Falun Gong. But such extreme measures also come with rising commercial cost. As more local companies and foreign investors come to depend on e-commerce, interference with their networks can cause serious economic disruption.

The commercial risks of messing with the Web is one reason Singapore's censors have all but given up the fight.

Singapore, which has long controlled the local media, has also invested billions in Internet infrastructure to become an "intelligent island." Print and broadcast are still restricted. But except for blocking about 100 porno sites, the government vows that the Net will stay free. "Singapore has no choice but to become a global city or its economy will decline," says National Computer Board CEO Michael Yap.

As political leaders the world over come to the same realization, their challenge will be to turn the unwieldy new medium to their advantage. That will mean opening closed governments to an online public and competing in the marketplace of ideas—rather than trying to napolize it. Ultimately, the Net's impact on politics may well be as diverse as the world's cultures.

With Richard S. Dunham in Washington, David Dawley in London, Irene Kunii in Tokyo and Elisabeth Malkin in Mexico City

Lumberjack



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Taming the Wild, Wild Web

WITHOUT STRONG LAWS, THE NET'S GROWTH WILL BE STUNTED • BY STEPHEN BAKER

It appeared to be an open-and-shut case involving nuclear pictures of a French model—reprinted without her permission. But these photos were posted on the Internet. No sooner did Estelle Hallyday win a copyright-infringement

suit last spring than things got complicated.

A French judge used a 40-year-old publishing law to slap AlternB, the company hosting the offending Web site, with a \$70,000 fine. AlternB promptly responded by shutting down its server, which hosted 4,000 Web sites. Then it threatened to lead a migration of French e-businesses to friendlier jurisdictions. Soon, "Keep the Net Free" groups rallied on the Web to AlternB's defense. Sites around the world thumbed

the
internet
age

their noses at the French courts by plastering the faces of Hallyday all over cyberspace.

In the end, Hallyday reached an out-of-court settlement with AlternB, which agreed to give \$7,000 to her favorite charity. By that time, property and privacy were irretrievable, and French law was moot. On the Internet, says cybervisionary Esther Dyson, "Things are moving a lot faster than governments realize. And how. In the early stages of the Industrial Revolution,

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coping with the technological and legal issues was a fairly forgiving process. If train tracks were different widths in France and Spain or travelers had to carry electrical converters to deal with different voltages, no big deal. But the Internet zips information across borders with the click of a mouse. The speed and scale are immense challenges for the rule of law. "We're having problems of pornography distribution to minors, violations of intellectual-property rights, potential violations of privacy, and new types of crime," says Ira Magaziner, the architect of the White House Internet strategy. "We've got to move quickly to get them addressed in real time so we don't engender a reaction against the Internet."

Bringing law and order to the Wild West of cyberspace will be a tall order. Without broad international agreements, the sheriffs, judges, regulators, and tax collectors are easily given the slip. That's why the settlers—not just the lawmakers—will have to play a large role in taming this frontier. Business, in particular, has little choice but to come up with its own system of rules if it wants to protect property rights and get customers to feel comfortable online. For better or worse, the Net is spawning two parallel and sometimes contending regimes for regulation.

The success of the two regimes—public and private—will determine how powerful the Net becomes. To develop into the world's largest marketplace, the Net must provide the same guarantees as any marketplace, from the rights of property-holders to the power of short-changed consumers to get refunds. In short, before societies en masse start buying cars and taking out mortgages online,



A V-Chip for the Web

A clamor went up from the moment the news broke that the high school killers in Littleton, Colo., had downloaded pipe-bomb construction plans from the Internet. Lawmakers, educators, and talk-show hosts all called for a clampdown on violent Web sites.

Not David Beier, Internet adviser to Vice President Al Gore. Worried that restricting free Net expression would set a dangerous precedent, Beier warned America Online, Yahoo!, and other leading e-businesses that they better take voluntary action fast to diffuse pressure for regulation.

In response, the companies fast-forwarded a project that had been under way for a year. Execs from 15 corporations announced their sites would suggest ways to download software limiting access to violent game sites, hate groups, or anything else deemed inappropriate for children.

Will this type of self-regulation be suitable for solving all of the Web's vexing policy problems? Certainly not. But look for it to be an important supplement to traditional legislation in many areas.

By Susan Garland in Washington

they'll need to ensure customers that their transactions are secure and legally binding. A Forrester search Inc. study predicts that the global Internet economy will reach \$3.2 billion in 2003 if it is managed well—but less than half as much if security and regulatory snarls persist.

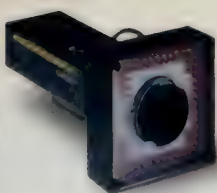
HUNG UP. It's not that regulators aren't trying. Negotiators at the Organization for Economic Cooperation & Development in Paris have been working on the most basic tenets of Internet Law for years—eons in Internet time. And they continue to get hung up over liability and jurisdiction. If a Japanese Web site with its server in the U.S. defrauds a customer in Canada, what laws count? This year seemed that the European Commission had ironed out an agreement on jurisdiction for its e-commerce directive. Then negotiations allowed for one seemingly small change: Customers would rely on consumer protection regulations in sellers' home countries. This would force merchants to wrestle with dozens of different laws

business uproar scotched the deal. "It's the exception that ate the rule," laments Microsoft Corp. attorney Peter Fleischer.

For business, the search for solutions starts, not surprisingly, with technology. An entire industry is growing around security, mainly software programs designed to keep hackers, thieves, or even government tax snoops, from infiltrating Web bank accounts, e-mails, or corporate purchasing networks. "It's a terrifying, brave new world," says Peter Beverley, managing director of Magex, an e-commerce security company in London. And even

FAST FORWARD

The **number** of e-business Web sites is expected to top **1 million** by 2003, up from **700,000** now. INTERNATIONAL DATA CORP.

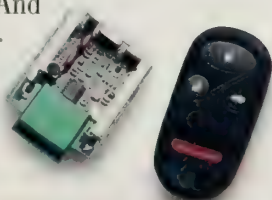


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time a hacker makes the news, the market for protection programs heats up.

At the same time, e-merchants know that technology alone provides scant comfort against gifted hackers and organized criminals. To allay fears, e-businesses are likely to start certifying safe sites. These would be industry seals of approval for sites meeting standards ranging from privacy to high-tech encryption of customers' or business partners' financial or health data. Eventually, Web-site rating agencies similar to debt-rating agencies are likely to emerge. In such a scheme, a security downgrade on a major e-merchant could prompt investors, customers, or business partners to flee.

HORNET'S NEST. It may be a while before governments can mete out such punishments. In the U.S., a national commission on Internet taxation is studying collection methods—but is deadlocked on whether Net transactions should be taxed at all. And the latest global efforts are faring no better. The nonprofit, quasi-government Internet Corporation for Assigned Names & Numbers (ICANN) has already stirred up a hornet's nest just by trying to manage the Web's addressing system.

Basically, governments are torn because making e-commerce secure seals out police who want to keep an eye on crime. In the U.S., for example, the National Security Agency wants to limit access to the world's top cryptography, and leave open access "keys" to encrypted computer systems; the fear is that cartels and terrorists, protected by a maze of code, will be able to conduct drug deals and plot assassinations with impunity on the Net. Meanwhile, the Japanese government may soon permit police to intercept e-mail. Russia forces Internet service providers to install hotlines to the Federal Security Bureau so agents can keep an eye on traffic.

Cultural differences rankle, too. Take the privacy battle between the U.S. and Europe, which wants strong rules to protect privacy in cyberspace. Europeans still harbor vivid memories of the Gestapo and Stasi amassing files on citizens. But what good is protecting a Dane's privacy in Denmark, if e-merchants in Kuala Lumpur are creating a profile based on her bank statements and video preferences? The European Union is enacting a rule to prohibit export of data, such as airline frequent-flyer information, to countries that don't meet European standards. That would include the U.S., where much of the data flow is protected by the Constitution.

Privacy may be the best example yet of how difficult it is to harness both private and public interests in regulation. For the past year, Europe and the U.S., the two biggest e-economies, have been negotiating a joint standard for protecting privacy. The U.S. proposal would set up a self-regu-

Click on the Dotted Line

While traditional government can't solve many of the policy problems, there are other areas where it's essential. Consider the matter of online contracts. Right now, so-called "electronic signatures," digital codes unique to an individual, aren't binding. That means that deals clinched on the Net have to be closed with traditional paperwork—a time-consuming nuisance.

To boost e-commerce, countries such as Germany and Singapore have recently passed legislation that gives e-signatures legal weight, and many others, including the U.S., are considering doing likewise. That has the business community, which has been generally leery of government interference on the Net, thrilled. "To promote e-commerce, you have to ensure that the way business is conducted in the world is transferred into e-commerce," says Jason M. Mahler, general counsel of the Computer & Communications Industry Assn. These laws won't weigh down the Net at all. In contrast, they'll make it possible for consumers to do exciting new things, like securely requesting money or IRA distributions over the Net.

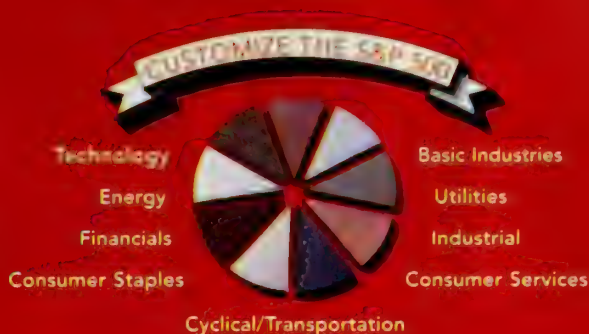
By Catherine Yang in Washington



latory body to create "safe harbors" for e-businesses to adhere to Europe's standards. If this proposal doesn't materialize, watch for a trade flap at November's Seattle round of World Trade Organization. For now, the result is a regulatory vacuum. "E-companies in Europe are not complying with Europe's law," says Clive Mayhew-Begg, international vice president at CDNOW.com, a leading online music business.

So Europe's law, like so many other attempts, promises only to disrupt e-commerce until it becomes world law, which is a long way off. Battles like this could rage for decades as the wild frontier of cyberspace gradually grows civilized. "There are no silver bullets, either legislative or technological," says Paul Saffo, director of the Institute for the Future in Menlo Park, Calif. "The way through this swamp is with a lot of small, comparatively weak solutions acting in concert. E-businesses may find out what it was like to run a sagebrush saloon before the law rode into town.

With Mike France in New York



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School Is Never Out

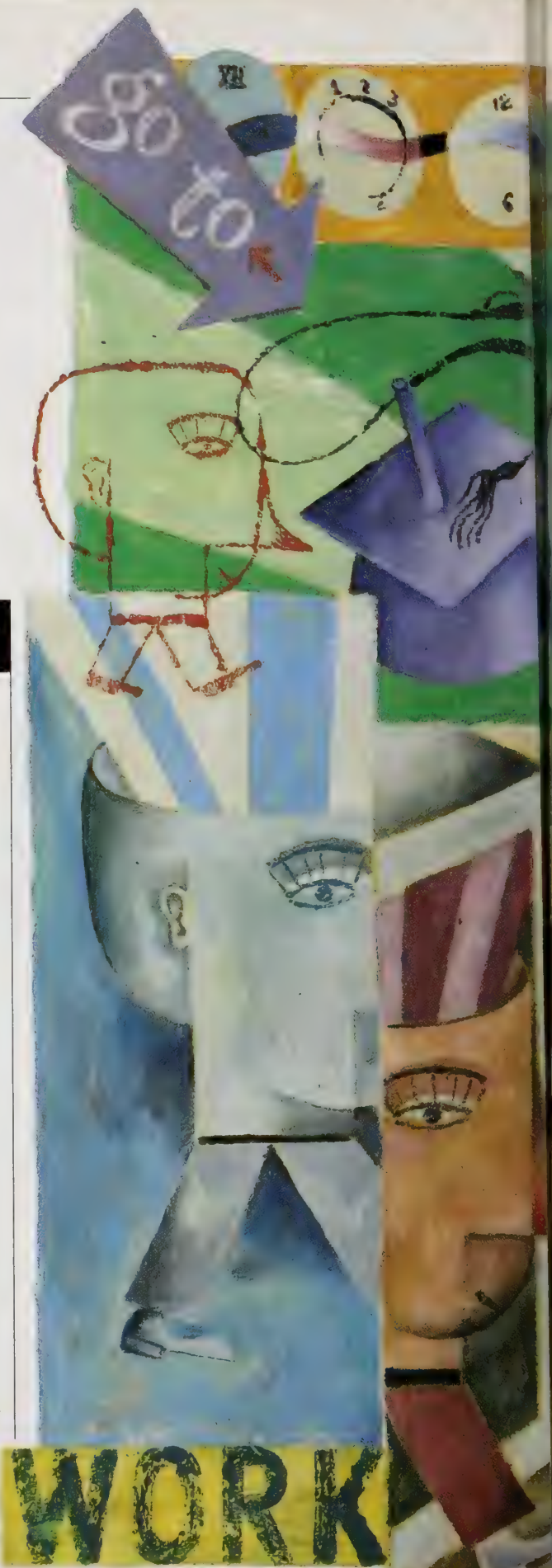
CONTINUING EDUCATION IS EVOLVING AT NET SPEED • BY JOSEPH WEBER

As the store operations manager for Berean Christian Stores, a Cincinnati-based book-

store chain with 22 outlets in nine states, Roger L. Feenstra spends a lot of time on the road. Much as he'd like to hone his managerial skills in school, he is hard-pressed to free up a couple of nights each week for class. His answer: the Internet and an extension program at the University of California at Los Angeles. "I can set my own pace," says Feenstra. "I can show up to class in my own time. I can spend five minutes in class, or two hours."

the internet age While conventional students—including his two college-age daughters—haul themselves off to classrooms to meet face-to-face with professors, Feenstra, 44, labors by laptop. He dials in to his program from his kitchen table in Riverside, Calif., or from hotel rooms across the country. He downloads lectures, submits papers, joins in student discussions, and even gets his grades over the Net (he just got an "A" in human resources). He puts in 20 hours a week online. "It's fantastic," says Feenstra, who is now embarking on his second learning-by-Internet class.

Like millions of others, Feenstra is riding the crest of a wave that is reshaping education. As job demands change at lightning speed, more and more people are becoming lifelong learners. Whether on the job or—more often—on their own, they are constantly updating their skills. It's thanks to the Net, though, that lifetime learning is hitting its stride now. As Feenstra has found, the Net brings the classroom to you, on your terms, in your time frame. "It's just-in-time, just-in-place learning," says John S. Parkinson, national





director for innovation and strategy at Ernst & Young.

The days when formal education ended after college or graduate school are rapidly disappearing. Some professionals have long needed to keep up their schooling to maintain their accreditation or licenses. Doctors often must meet annual educational requirements to prove they are up to date on medical advances, for instance. Now, businesspeople find they too must hit the books anew or risk losing out to competitors.

The numbers are dizzying. While just 23 million Americans took part in adult education programs in 1984, according to the National Center for Education Statistics, the figure had risen to 76 million by 1995, and, some prognosticators say, it could top 100 million by 2004.

COMMONPLACE. To the surprise even of many of the people doing it, lifelong learning is becoming commonplace. "I never expected to need to go back and do another degree," says Shermaine A. Tilley, a 47-year-old AIDS investigator and associate professor at New York University's medical school. Tilley got her PhD in biochemistry at Johns Hopkins University in 1980. She wants to move into venture capital or business development in the drug industry but felt a gap in vital business skills. So Tilley is halfway through a two-year MBA program at the University of Toronto's Rotman School of Management. Contending that academic science has become more businesslike, Tilley says: "If I'm really doing business, though we don't call it that, I may as well get paid for doing business." The degree will help, she figures.

For many working people, educational updates will come at the workplace. At outfits as disparate as General Electric, Unisys, and Federal Express, corporate universities give up-and-comers a mix of company culture and management skills in programs that can last from a day or two to up to three weeks. The aim: to give managers "the ability to energize other people," says Steven Kerr, GE's chief learning officer. Where just 400 company-run universities operated in the U.S. in 1988, there are now over 1,600, according to Corporate University Xchange Inc., a New York research and consulting firm.

In these corporations, too, the Net helps expand education offerings. Web-savvy startups such as Pensare Inc. of Los Altos, Calif., are partnering with the likes of Wharton and Harvard Business School Publishing to develop online programming that corporations can use over their internal networks. Unlike conventional degree programs, the programming is usually targeted at specific skills such as the art of negotiation or customer relations. "We try to focus on what you need to do your job," says George W. Dunne, vice-president at Unisys University, a Pensare partner. Outside the corporate environment, schools are responding to lifetime learning demands by putting educational programs on the Net. This isn't just the cyber-



space equivalent to the old back-of-the-matchbook correspondence school. Master's degrees can be earned online, for instance, from schools as prestigious as Stanford University. Andy DiPaolo, senior associate dean at Stanford's engineering school and executive director of the Stanford Center for Professional Development, says: "Students need to be educated at any place and at any time and universities are trying to figure out how best to do that."

REWINDING CLASS. At its best, Net education can trump conventional classroom learning. While staying close to his job site in Vancouver, for instance, Hewlett-Packard hardware design engineer Allen Ong can log on for classes in Stanford's online engineering master's degree program in Palo Alto, Calif. He taps into taped three-hour lectures and uses an indexing feature to pull out the salient bits of a talk. He can even rewind, something he couldn't do in regular classes at the University of Alberta. In Net classes, students too shy to raise questions in person may be less inhibited, and the answers they get from peers and teachers may be better thought out. What's more, there's no hasty scribbling of notes from slides when the whole slide set is downloaded.

Cyberstudents may not be getting a bargain, however. Syracuse University charges the same tuition—about \$32,000—for its Net-based MBA and its classroom version. Stanford, which traditionally charges higher tuition to part-timers, bills a distance-learner about \$45,000 in tuition to earn an engineering master's degree vs. \$26,000 for a classroom student.

Some educators say the students ponying up those fees are getting a second-rate education. The Net, they argue, can't re-

LAPTOP LESSONS: Roger Feenstra's hectic business-travel schedule doesn't allow for regular adult-ed classes. So he logs some 20 hours a week learning online

place the spontaneity and depth of person-to-person interaction. "There is no substitute for the academic environment," insists Carole S. Fungaroli, an adjunct professor of English Literature at Georgetown University and author of a forthcoming book, *Traditional Degrees for Nontraditional Students*. "As professors, we can really change students' lives, not if we never see them, not if we're never face-to-face."

Still, for many students the Web variety of distance education may prove just as life-changing—and far more practical. Molly Hilton, a 33-year-old project leader in market communications at office-furniture giant Haworth Inc. in Fland, Mich., has an undergraduate English degree and is taking UCLA Extension courses online to prepare for an MBA program. With Haworth footing the bill, she will soon choose between a conventional classroom regime at Western Michigan University and a Net-based degree, perhaps through Syracuse. After her UCLA experience, Hilton is leaning toward Net degree. The reason: She believes that e-mail enables instructors to be more attentive to their students online than in class. What's more, as the single mother of 9-year-old Mac and 7-year-old Tressa, she finds that the Net lets her better manage family, work, and school obligations. Says Hilton: "With online learning, we sit at the table together and do homework."

Even in more conventional programs, the Net is p

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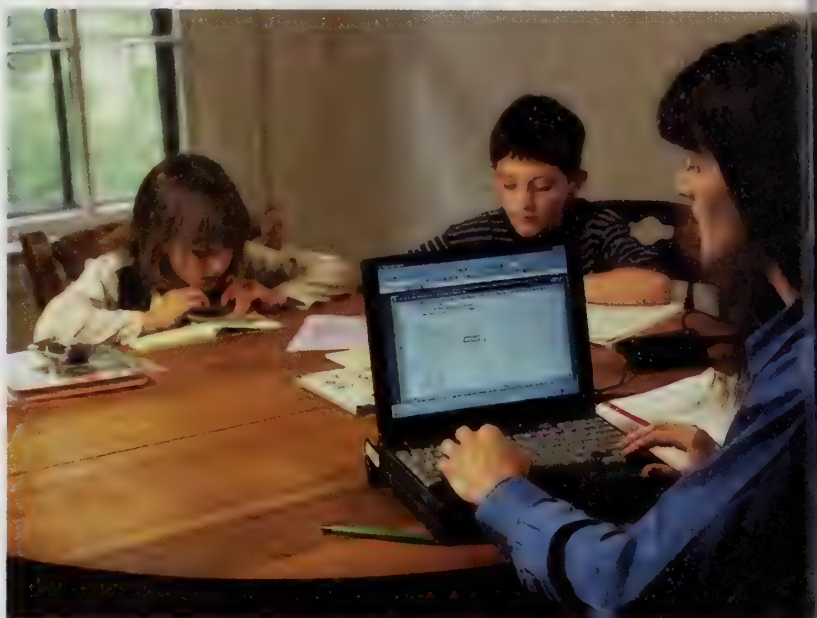
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foundly changing the educational experience. MBA students at the University of Toronto, for instance, still meet with professors and fellow students in classrooms. But they typically download lecture notes in advance, discuss them in online chat rooms, and swap materials for group work electronically. Instead of spending the wee hours at the library, they're often hunched over computers at home. "The whole online experience is not necessarily meant to replace the on-ground experience. It is just another avenue," says Jeffrey E. Feldberg, chairman of Embanet Corp. Feldberg's company creates and maintains electronic communities among Rotman students as well as among students at Fordham and Vanderbilt universities, UCLA Extension, and some 200 other institutions around the world.

Over time, education will likely prove to be a mix of conventional classroom work and distance learning. Undergraduates may still opt overwhelmingly for four years of ordinary campus life—with lots of Net-aided courses—but later many could wind up doing advanced studies by computer from afar, perhaps while holding down full-time jobs. Certainly, that's what forecasters at International Data Corp. expect. Where there were just 710,000 U.S. students in distance-learning programs in 1998, or some 4.8% of the nation's 14.6 million higher-education students, IDC forecasts that the number will rise to 2.23 million, out of 15.1 million students overall, by 2002.

THE FORDHAM MODEL. For a good blend of face-to-face schooling and Net learning, one model for the future may be Fordham University's Transnational MBA Program. Over a 15-week semester, students meet one weekend a month, usually in or near New York City but sometimes as far away as Dublin, Ireland. The rest of the time, they communicate with their teachers and fellow students via the Net, reading lectures, filing papers, and doing group work. The students typically work for multinationals such as IBM, and find the school mimics their workday environment. Says Ernest J. Scalberg, dean of Fordham's Graduate School of Business Administration: "We try to emulate what it's like for people in transnational organizations."

Fordham has found, though, that the Net can't do it all. Online courses may foster a sense of community among distant classmates, but the one-on-one



HOME STUDY: Single mom Holly Hilton, with daughter Tressa and son Mac, easily can fit distance learning into her family's routine

meetings inevitably foster far richer interactions. Discussions that start in a hallway or nearby pub. Students in the Fordham program hold down regular jobs—and their companies typically pay the \$74,000 freight—but

keenly enjoy the weekend seminars. "It's fascinating to learn about the cultural diversity of IBM and benchmark National Starch vs. IBM," says student Masoomah H. Chari, a 37-year-old marketing manager at the National Starch & Chemical Co. unit of Imperial Chemical Industries. Her fellow students, she adds, "ask really interesting and insightful questions."

Plenty of people have neither the time nor the money for programs that include the face-to-face meetings. For them, pure online offerings make the most sense. OnlineLearning.net, the company that develops courseware for UCLA Extension, expects its online enrollment to jump to 10,000 next year from nearly 6,000 now and 2,200 last year. The nondegree programs appeal to people with advanced schooling already (half the enrollees have master's degrees) and women (about two-thirds of the student population). Says OnlineLearning.net Chief Executive John E. Kobara: "We have told us in tremendous numbers that the only way to go back to school, given their families-and-career balancing act, is online."

Whether narrowly drawn or broadly focused—and whether it's exclusively or only partly delivered on the Net—education in coming years won't stop at the schoolroom door. The need for new or refreshed skills is just too great. As graduates speak, they have intoned for years, commencement really is just a beginning.

FAST FORWARD

The number of people taking undergraduate and graduate courses online will increase from **710,000** last year to **2.23 million** in 2002 and account for **15%** of all higher-education students.

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Work à la Modem

LONG DISTANCE: Barker beat in to New York from Florida

BEING A TELECOMMUTER HAS ITS JOYS—AND HEADACHES • BY ROBERT BARKER

Back at the dawn of modern life, four or five years ago, I went out on my own. Not to start a company. I simply left one regular job, with a boss, a W-4 form, and all, for another. But instead of driving each day

113 miles to and from a newspaper office full of amusing, schmoozing, scheming, and sometimes annoying colleagues, I began spending my workdays alone. I began to telecommute, working in Florida as a writer for magazines in New York City.

Boy, do I ever get a lot of questions about what it's like to work this way. People ask if I get lonely. Yes, I tell them. They want to know how did I get to do this? I'm not altogether sure, so I usually mumble something about "close professional relationships." They ask how do I get anything done? I say it's easy if you like your work. Being alone, do I act weird? No more so than before, not counting the time I bought one of those 2.5-gallon jugs of water, set it on a table, drew a cup, and began gossiping with myself.

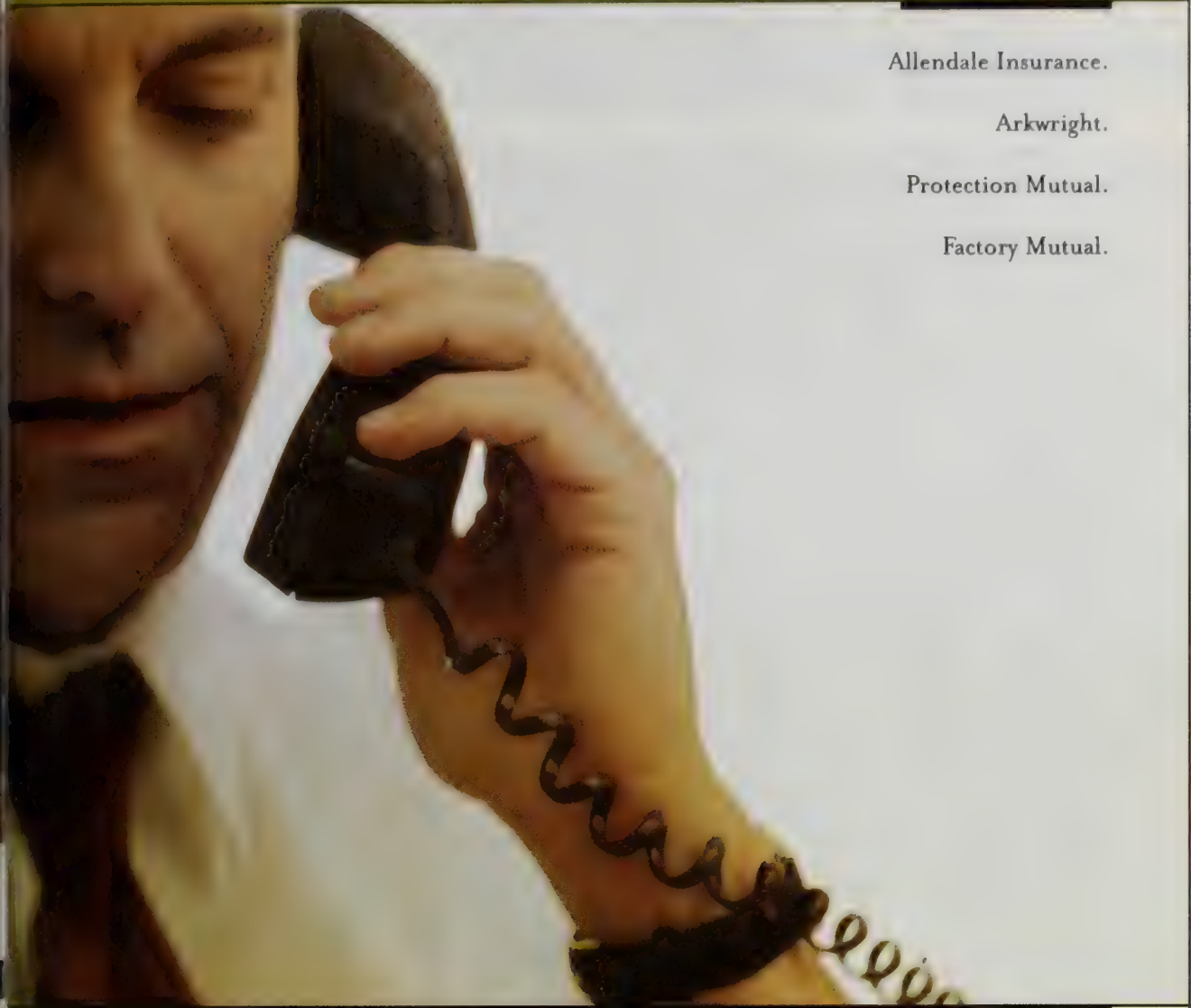
The questions usually circle this central point: Don't I feel askew, like some goofy appendage to the world of real ca-

reers? I used to say yes, sometimes. Now, I always say no. The number of telecommuting Americans quadrupled in the last decade, to nearly 16 million, many in jobs like mine and other New Economy "knowledge-based" industries. But I was surprised recently to see a help-wanted ad for a telecommuting structural engineer. And my neighbor went skydiving last winter in Colorado with a bunch of software writers who plunged down the Rockies by parachute and knocked out code by night.

The Internet is enabling such oddities, as more business is done online, telecommuting is no longer the career dead end some people warn me about. Yes, there are risks. But there's also the chance to feel like a pioneer, resourceful, self-reliant, open to unexpected prospects.

Most telecommuters work at home, but to me that seemed like a terrible idea. Way too many distractions, especially

the
internet
age



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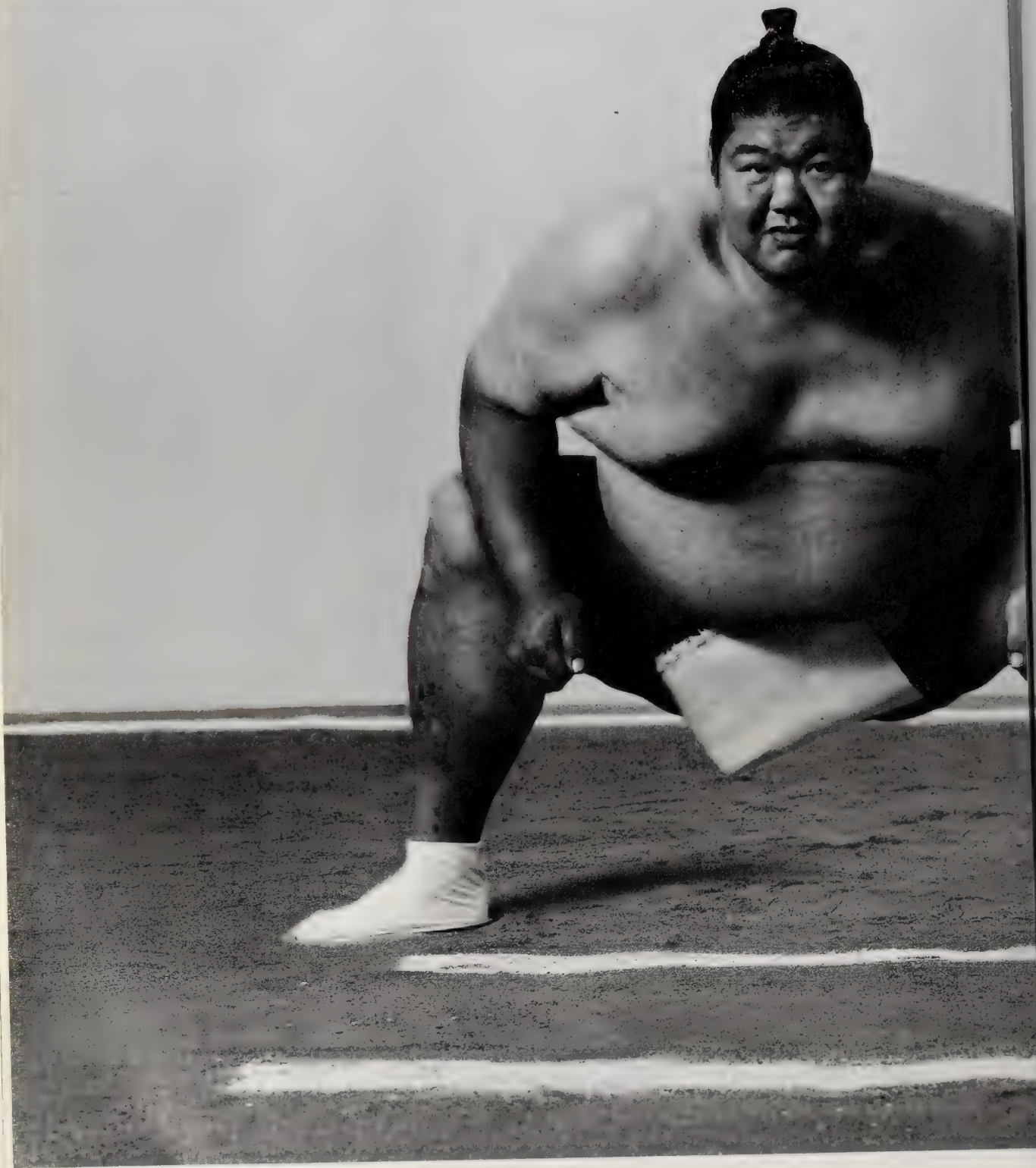
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my two kids. That's why I lease an office in a two-story stucco bank building four blocks from my house. The singular nowhereness of my little town—a square mile of Atlantic barrier island called Melbourne Beach with 3,200 souls and zero stoplights—means rents are cheap. Mine is less than the highway tolls I used to pay.

If you were to visit, you might find my office kind of spooky. Downstairs are the bank and a travel agency. Beachcomber's Beauty Salon, whose mermaid sign hangs out front, closed a couple years back.

Upstairs, it's so empty that my wife tells people I'm a squatter. I've had a few neighbors, including a profane, chain-smoking accountant named Dick, and a real estate man, Bill, who gave me bags of sweet citrus from his yard. He died last year.

Keeping me connected are three phone lines—voice, fax, and data—plus cable TV, a friendly Federal Express man, and the occasional trip to New York. For me and every telecommuter, staying in touch is a big part of the job. A work-at-home Fidelity Investments executive once told me she even takes her phone to the bathroom so as never, ever to miss a call. Recently, I was talking about all this with Daniel Gorrell, an auto-marketing consultant, who has telecommuted since 1990 to a San Diego firm, Strategic Vision Inc., from his Orange County home two hours north. "It's not the leisure class," he snorts. "Most people are working harder and longer." The night before I spoke with Dan, a Sunday, he had been up at midnight, calling clients at Renault in Paris.

Because we are helpless without our phones and computers, they take on the character of crucial but unfathomable colleagues. "Whenever there's the slightest glitch, I become quite panicky," Susan Sharin told me. Susan is an investment adviser who used to commute the 42 miles each way to Providence but now works from her home on 14 acres near Eastford, Conn. Susan practices yoga in the same room where she minds \$25 million. After struggling with her computers, she concluded, "they're not logical, and you simply have to accept them."

This is a level of consciousness that I have yet to reach. Another telecommuter I've met, Jill Fallick, handles computer glitches more sensibly: She gets her husband to fix them. Jill is a product manager for Morningstar Inc., the investment-research



HOME STRETCH: Sharin does yoga in the same room where she manages \$25 million

firm in Chicago. That's where she worked from 1994 to August, 1996, when her band's career drew her to Silicon Valley. Jill told me, "I had a great manager who had a fundamental trust in the people who worked for her. She asked me, 'Would you consider staying on

telecommuter?' And I said, 'Yes!'

I worked at two other companies, and I knew how it can be when you don't like the people."

Pregnant at the time, Jill moved with her husband to a three-bedroom rental in Atherton. The spare bedroom is her office. In it, she says, are a big, old desk, shelves piled with reference books, a bogus Oscar and a teddy bear, a Pentium II computer with 17-inch monitor and Lexmark laser printer (Jill paid), a Hewlett-Packard fax machine and copier (Morningstar paid), a photograph of her husband and 2-year-old daughter, Meredith, three phone lines, and a cable modem "which is my pride and joy. Morningstar pays for that."

"BRICK WALL" Facing Jill are two clocks, one set to California time, the other Chicago time. By the time the Chicago clock reads 9 a.m. each workday, Jill has taken Meredith to day care and is on the job. At first she worried plenty. "There's a sense that you have to overproduce," Jill told me. She felt this pressure despite having lots of people back in Chicago who knew who I was and who didn't think I was some weird person out in California. I just had to trust that they were behind me.

Jill had to teach herself to extend that trust. "When you start telecommuting, suddenly part of what you're doing is managing a whole PR campaign about yourself. You're not a key person in the office anymore. On her first assignment, Jill conceived a plan to keep clients by product improvements and sharper use of customer databases.

Yet when it came time to execute the plan, "I kept coming up against brick wall after brick wall," she says. "That was the point of highest anxiety." Bits and pieces of the plan ultimately were put into effect, but as a whole it died.

Eventually, Jill took on a new role, coaching project managers how to handle things like budgeting, market research, and product development. Getting back into the groove, she says, "is where my relationships in Chicago served me." What made those relationships work? "People know that

"There's a sense that you have to overproduce... You're not a key person in the office anymore"

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they're in a bind, I'll say, 'Sure, I can help.' You have to be even more of a team player."

It's extra effort, and not everyone sees the point. One of Jill's colleagues, Laura Lалlos, returned to Chicago last year after working as an investment analyst for 18 months from Oregon. She has seen both sides now. "The main differences," Laura told me, "are that when you're telecommuting you're far more productive than you can ever hope to be in the office. But you don't really have your finger on the pulse of the company." With-

out that sense, Laura feared the company would expand into new markets, leaving her behind. She's happy to be back in Chicago, where she has a new position at Morningstar's Web site, something she couldn't have achieved in Oregon. But she's also more aware of the time lost commuting, and at the office, she's "much less patient with the droning that goes on in meetings." Every telecommuter I know is glad to miss most meetings. But we know, too, there are losses, both to the business and ourselves. As Laura notes, "there's only so much you can do out of the office." Had she not returned, she figures she and Morningstar eventually would have parted.

Telecommuters all wonder: Will the copper wires binding us to our livelihoods snap? Once, at a barbecue, my host told me about a guy he knew, a writer on the Gulf Coast who had a sweet deal with a computer publisher in New England. "One day the publisher just decided he could get the work done cheaper up North and cut him loose," he told me, jabbing a chicken breast. "And that was it: He was toast."

Getting canned is a worry for most anyone with a job, but it concerns me less now than when I started telecommuting. In part, this is simply because I've gotten used to my unusual situation. But employers are also way more open to telecommuting now than five years back. I don't expect any telecommuter to become CEO of a bricks-and-mortar company, yet there's a palpable sense of opportunity fostered by the Net.

As the Net hurtles forward, as more work is done by modem, as telecommuters morph into cybercommuters, working remotely has become, for some, a competitive advantage. Jill Fallick, now expecting her second child, just



NET GAIN: For Fallick, cybercommuting has turned out to be a competitive advantage

won "a really new, challenging project that I never would have been given had I been in the office." She says. As a cybercommuter, she's become more dependent on the Net and so intimately familiar with it, she credits much of the research for her project via the

putting her squarely where Morningstar sees its future: "The whole world now is Internet, Internet," she says—the world in her spare bedroom. "DELICATE QUESTION." Web sites lead me to new people, stories, new opportunities, every week. That's how I discovered Dan Gorrell. It's also how I met Susan Sharin. I asked Susan to compare people she encountered in the brokerage office where she worked with those she meets now. "A delicate question," she told me by e-mail. "Truth is—the real people I have met in my cybercommuting life are far more interesting."

But can a cyber-relationship replace one forged in flesh? Dan thinks not. Face time, he says, is critical not for his own sake but to build empathy. "It's a human connection," he says. "It takes time, and human beings need visual cues, the symbols of being together and caring for one another."

That's what I used to think. Now, I'm not so sure. One example is what happened to Susan. A couple of years ago the Net led her to a like-minded man in Oregon. They corresponded online for months, slowly discovering a common look on managing other people's money. After scads of e-mail, but without ever meeting to shake hands, they became partners in a virtual firm, Efficient Frontier Advisors. They have since met, once, and the firm already has more than doubled the money Susan manages. But even before that, Susan arranged to have her new business partner stay the night in New York as the guest of her 85-year-old mother. "He did not turn out to be a serial killer or anything," she says, laughing.

Does that seem funny to you? When I heard the story, it struck me as positively nuts. But so did telecommuting the day I heard the word, sometime late in the last century.

Barker, who left *BUSINESS WEEK* in 1993 to move to Florida, has rejoined the magazine and writes a column

The Barker Portfolio

FAST FORWARD

Ten million people, or **4.5%** of the workforce, characterized themselves as telecommuters in **1998**. By **2001**, nearly **8%** of the workforce could be telecommuters

THE GALLUP POLL

Which professional services firm understands Berlitz International, Inc.?

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From: Bill Gates
 Sent: Friday, August 08, 1997 10:54 AM
 To: Paul Mantz, David Stutz
 Cc: Greg Maffer, Don Bradford, John Ludwig, Paul Gross
 Subject: FW post-agreement

I want to get as much mileage as possible out of our browser and JAVA relationship here

In other words a real advantage against SUN and Netscape

Who should Avie be working with? Do we have a clear plan on what we want Apple to do to undermine SUN



Like It Or Not, You've Got Ma

E-MAIL BRINGS CONVENIENCE—BUT AT WHAT COST? • BY JOAN O'C. HAMILTON

"My letters! all dead paper, mute and white! And yet they seem alive and quivering..."

—Elizabeth Barrett Browning, *Sonnets from the Portuguese*

"E-mail is like coming home at night after a long day and finding 70 people in your kitchen."

—Irish poet John O'Donoghue

Last year, we're told, the volume of e-mail in the U.S. surpassed the volume of hand-delivered mail. What an extraordinary development that is. Imagine the billions of connections it represents—the deals proposed, the complaints lodged, the flames fanned, the jokes circulated, the babies announced, the stocks hawked, the fierce tribal loyalties proclaimed (Go, 'Niners!), the old lovers or childhood friends who reappeared, not with a daisy or a crooked grin, but with "Remember me?" in the subject line of an e-mail.

Whether for work or for personal correspondence, the 3 billion-plus messages zipping back and forth each day have become the oxygen of the Internet Age. E-mail's convenience, ease, and efficiency are unparalleled. E-mail can let two people transact business like machines calibrating: "Get it?" "Got it." "Good." No more lingering in hallways to catch the boss for a simple yes or no, no more days of phone tag, no more evaporation of inspiration while you assemble the physical elements of an actual letter, from paper to stamp.

And that's just what it does one-to-one. E-mail ranks

the
internet
age

with such pivotal advances as the printing press, the phone, and television in mass impact. "When we were limited by the physical world, we could knock on 2,000 doors. Now, it's a small movement of the smallest finger" that can do everything from wedding announcements to telemarketing spam to the multitudes, says Michael L. Dertouzos, director of the laboratory of computer science at Massachusetts Institute of Technology. Unlike Marshall McLuhan's "cold" passive television medium, which just spews whether or not you're looking at it, Dertouzos notes that even the most trivial and off-putting e-mail compels you to read with it—if only to delete it.

DIRECT LINK. "What e-mail is beginning to do is pave the way for the introduction of industrial democracy," believes Maghroori, dean of the school of business at San Francisco State University. "Ten or 20 years ago, there was no way for average workers to communicate with leaders." Nor even the top brass to send marching orders to the troops without them getting parsed, spun, and dribbled out through agenda-laden bureaucracy.

Like other technological advances, e-mail has been tainted by some amount of hand-wringing that it will cha

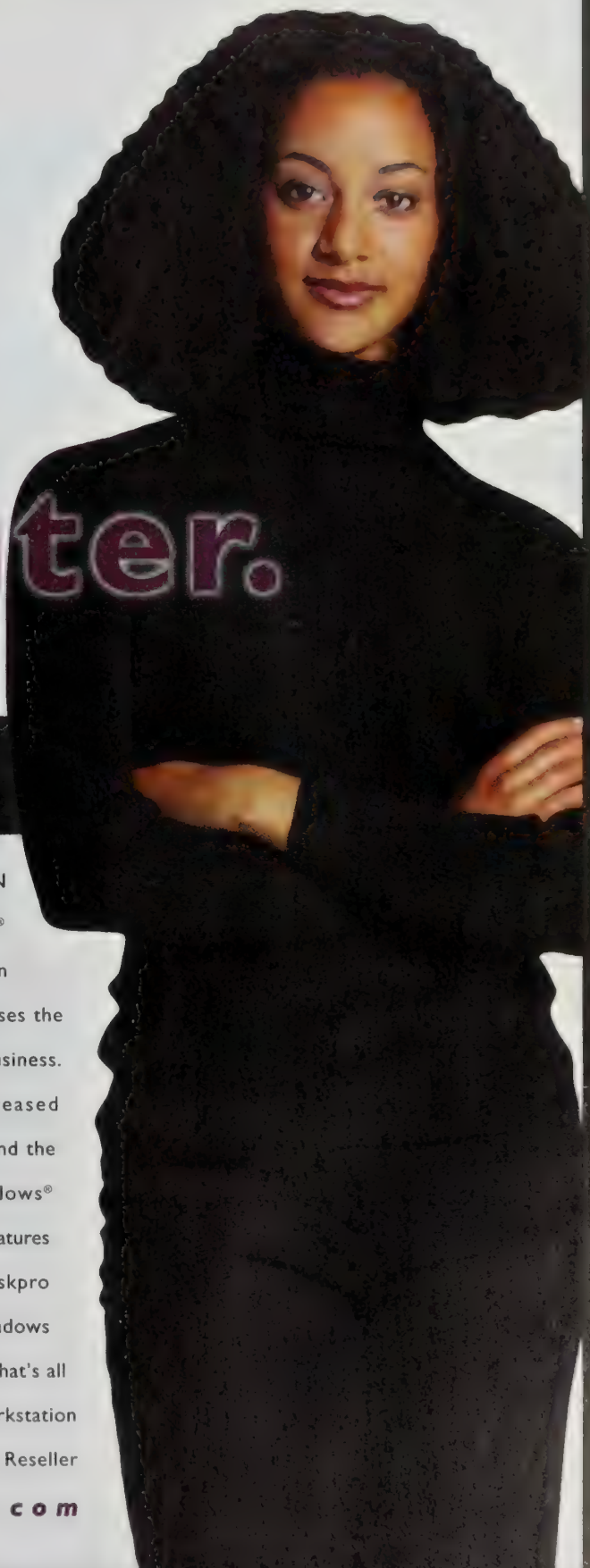
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† Research Windows OS User Reliability Study (9/98). Participants using Windows NT Workstation were about three times less likely to experience serious system stoppages than users of Windows 95.

†† Data compared Windows NT Workstation 4.0 to Windows 98 operating systems using JAH Data (JAH) Winstone® 98 1.0 on computers with 64MB of RAM. Test performed without ventilation by JAH. JAH makes no representations or warranties. Winstone is a registered trademark or trademark of JAH, Inc. and other entities.

our very natures, making us less thoughtful, quicker to anger, even less human. Not so far, anyway. If anything, it has let 1,000 new intimacies bloom that might have been impossible any other way, from the online communities of disabled folks to teens who've replaced phone chatter with group chat rooms and e-mailing lists. "Seniors are on fire wanting to learn about this"—to make new friends and communicate with far-flung family members, says Colette Brinkman, a seventysomething volunteer at a Silicon Valley elder-hostel program. Early Internet prognosticators "believed e-mail would be cold and impersonal and [that] people could never develop relationships online. In fact, the opposite has happened," says Susan Barnes, a Fordham University communications researcher.

I like e-mail. I use e-mail. Yet I must admit that I fear that we may be losing some substance in the e-mail revolution. For one thing, I line up with Paul Saffo, who is a forecaster at the Institute for the Future. Saffo likes to think of e-mail more as an infrastructure triumph than a paradigm shift. He likens it to the creation of the postal service in 18th century England. "There was a letter-writing fad during that period that was equivalent to what's happening in e-mail today," Saffo notes, and the letters of men such as Samuel Johnson and Lord Chesterfield became famous. But that's because those letters were saved. With e-mail, "we won't remember a lot of the stuff because it's all evaporating," Saffo worries.

VULNERABILITY. Indeed, despite the illusion of eternal archives of e-mail, huge stores of it get lost all the time as systems get upgraded, hard disks crash, purges are ordered. In Washington today, debates are raging about how much e-mail the federal government should keep for posterity. Would this letter fished from a dusty file a few years ago have made the cut? "First, I want to thank you, not just for saving me from the draft," wrote young Bill Clinton to U.S. Army Colonel Eugene Holmes in the late 1960s, "but for being so kind and decent to me last summer, when I was as low as I have ever been." Clinton did manage to get even lower, but the vulnerability he displayed in this early letter is a fascinating historical record.

Think about the difference between e-mail and a treasured letter. Subject matter is always important—but so is the physical form. How many e-mail messages can evoke the emotions of a life-changing letter—a "Dear John," for example, or

“You want to ring in on this telephone biz, it has a great future. Keep writing letters”

THOMAS A. EDISON



Friend Mackenzie

Menlo Park N.Y. Sept 2/91

I will show your card to Mr. Orton and put in a good word. I know he intends to appoint agents for the introduction of my speaker, and I think he is going to sell them outright instead of renting - what we Bells terms to agents. Jimmy was only 2 1/2 feet high when I used to plague him. You want to ring in on this Telephone biz, it has a great future. Keep writing letters, Write Wm Orton direct, also write Hager at Chicago.

Your old friend
Thos A. Edison

your child's first one letter to you. The intimacy of handwriting or just a signature in a letter carries an emotional weight to mention that

can tuck it away or crumple in disgust or reread it on a smudge or even imagine that there is the gravity of knowing that a letter took a physical, times even perilous journey. It could have snatched one of most memorable letters from a postman's bag and soaked it in a storm drain, and things—or might well have been different. When an e-mail gets misaddressed it bounces right back, spouting an indecipherable code.

I don't envy bad e-mails tussles with the dread "no daemon." But the image in comparison to the rich variety that real letters provide. For example, letters of war. A soldier tucked into a foxhole scribbled

by hand, looking up to the heavens searching for the words in a letter that could be his last. Thanks to e-mail those letters are getting fewer and fewer. Beginning with the Persian Gulf War, the military has been making e-mail available to troops. Don't get me wrong. I know it's a tremendous relief and comfort to loved ones worlds away. However, drew Carroll, head of the American Poetry & Literacy Project, is assembling a collection of 10,000 letters from soldiers that span the period from the American Revolution to the recent Balkans conflict—including printouts of soldiers' e-mail. "The soldiers today are much smarter and better educated than they were 130 years ago, but the Civil War letters so profound," he says. "The e-mails didn't match up."

U.S. Librarian of Congress James H. Billington also worries that e-mail is sparking a decline in our language itself. "The letter is an artifact and emblem of civilization," he says. In part, that's because of the discipline Billington finds in handwriting or even typing or dictating brings to a letter: it informs the actual content, sharpens it up, imposes so much logic and sincerity by its very physical form.

There's no question that the physical process of writing affects a great piece of communication. Warren E. Buffett, for example, has turned what is possibly the most over-lawyered and tedious category of all human letters—a ch



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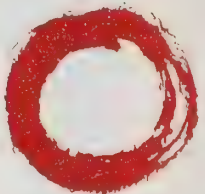
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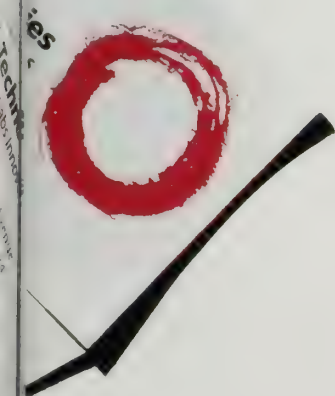
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communications work.



man's annual report note—into a highly anticipated gift to Berkshire Hathaway Inc. shareholders.

Each year shortly after New Years, Buffett sits down with a yellow legal pad and a black felt pen and imagines, according to Lawrence A. Cunningham of New York's Cardozo law school and the editor of a new book about Buffett's letters, that he's writing "to his sister, who he considers an intelligent non-expert, smart but not business-savvy." Buffett invokes everything from baseball to Mae West to illuminate his company's performance and business trends. And the upshot is just what you would expect from a fond brother—humor, respect, candor, and sincerity.

Handwriting also brought out the muse in über-tycoons such as Andrew Carnegie. On one hand, he had funny exchanges with his friend Mark Twain. But in a memo to himself, he also wrote: "The amassing of wealth is one of the worst species of idolatry. To continue much longer overwhelmed by business cares and with most of my thoughts wholly upon the way to make more money in the shortest time, must degrade me beyond hope of permanent recovery." It's got to be far more wrenching to pen such a statement with a quill than to rat-tat-tap it out on a keyboard. In e-mail argot it might have come out: "Gotta get a life."

HAUNTED. "What we're getting through e-mail," Billington complains, "is the staccato language of air-traffic controllers and computer jocks. It's the end of sentence structure; an extension of shortened attention spans." And sometimes it's an insight to notions, schemes, and reactions better left unsaid, certainly better left unwritten. Even aficionados such as Microsoft Corp. Chairman William R. Gates III get tripped up. E-mail feels private, but during his company's recent antitrust-trial depositions, certain volatile, aggressive e-mails unearthed in legal discovery came back to haunt him.

What I really found fascinating was Gates's defense about a number of e-mails. He said that while he didn't dispute that they were his—such as one asking "Do we



"...we shall expect your concern to furnish the capital to run it, and we shall expect to get back out of it all that we have of capital"

JOHN D. ROCKEFELLER

W. Archibald Esq.
Pres. Acme Oil Co.
Titusville, Pa.

Dear Sir: I forgot to say to you this morning, that in taking that work, we shall expect your concern to furnish the capital to run it, and we shall expect to get back out of it all that we have of capital in it at the earliest moment.

Yours truly,
J. D. Rockefeller
President

Dec 27 '7

have a clear plan on we want Apple to undermine Sun?"—he not recall sending it member what he meant. Whether you able to believe Gate not, could you imagine claiming that about signed letter or a handwritten note?

Still, the more I into all this, the more realize it doesn't pa overanalyze the e we're using today. one thing, if you the scale is intimidating today, Dertouzos pre it will grow tenfold years, upping the a age person's inbox more than 1,000 mess a day. But tech types tell us that much so today's mostly text and occasional photo attach will look as primitive cave paintings. Douglas Hickey, CEO of Critical Inc., a Silicon Valley

company that is providing the underlying technology for all k of innovative e-mail capabilities, says that e-mail will incorporate not just still pictures but also audio, video, even voice-mail elements plucked from our phone system.

For instance, Hickey's 14-year-old daughter spent summer in Mexico with a church group building house. Thanks to a digital camera and some of her dad's technology, she sent him daily e-mails with photos on how construction was going. As a parent, I'd trade a bit of staccato prose for the thrill of knowing your adventurous kid safe, happy, and turning out so well.

So when my e-mail in-box gets packed with unwelcome guests, I'm trying not to get too worked up. It has been only years since the first true e-mail zipped from Los Angeles Menlo Park, Calif.—its message a laconic "login." E-mail it is evolving, and the way we're using it is evolving. Whatever the technology, we're still humans, dying to communicate gratefully and celebrating when we connect.

FAST FORWARD

The number of e-mail messages sent on an average day in the U.S. was **300 million** in **1995** and will hit **3.5 billion** this year. By **2002** the traffic will total **8 billion** messages.

SOURCE: INTERNATIONAL DATA CORP.

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A Small Town Reveals America's Digital Divide

EQUALITY HAS YET TO REACH THE NET • BY MARCIA STEPANEK

When I first encounter the Reverend Jimmy Lee Price, he is standing on a grassy hilltop outside the Fairview Community Church in Prices Fork,

Va., on the edge of rural Appalachia.

Prices have presided over this stretch of the Blue Ridge Mountains for 12 generations and have worshiped here since the 1920s.

The church draws folks, black and white together, from old coal-mining towns as far away as Gap Mills, New Castle, Roaring Run, and Sinking Creek. "This is good land, quiet, the place to resort to if things get wicked," says Price, 59, his faded blue eyes and blond hair typical of the Price family members tied to these parts. "We're at the end of the road out here," Price says. "You can't get much further than this."

Every Sunday morning, the six-foot-two, 270-pound Price uses his interdenominational Christian pulpit to inveigh against racial prejudice and the evils of class conflict and mate-

the
internet
age

rialism. "In the 1920s, '30s, and '40s, different races and classes were thrown together by common need," says Price, the son of a coal miner and the only one of six brothers to get a high school education. "We all worked together, different types of folks, and we always went to church together. We made a little pocket of love out here in Prices Fork," he says.

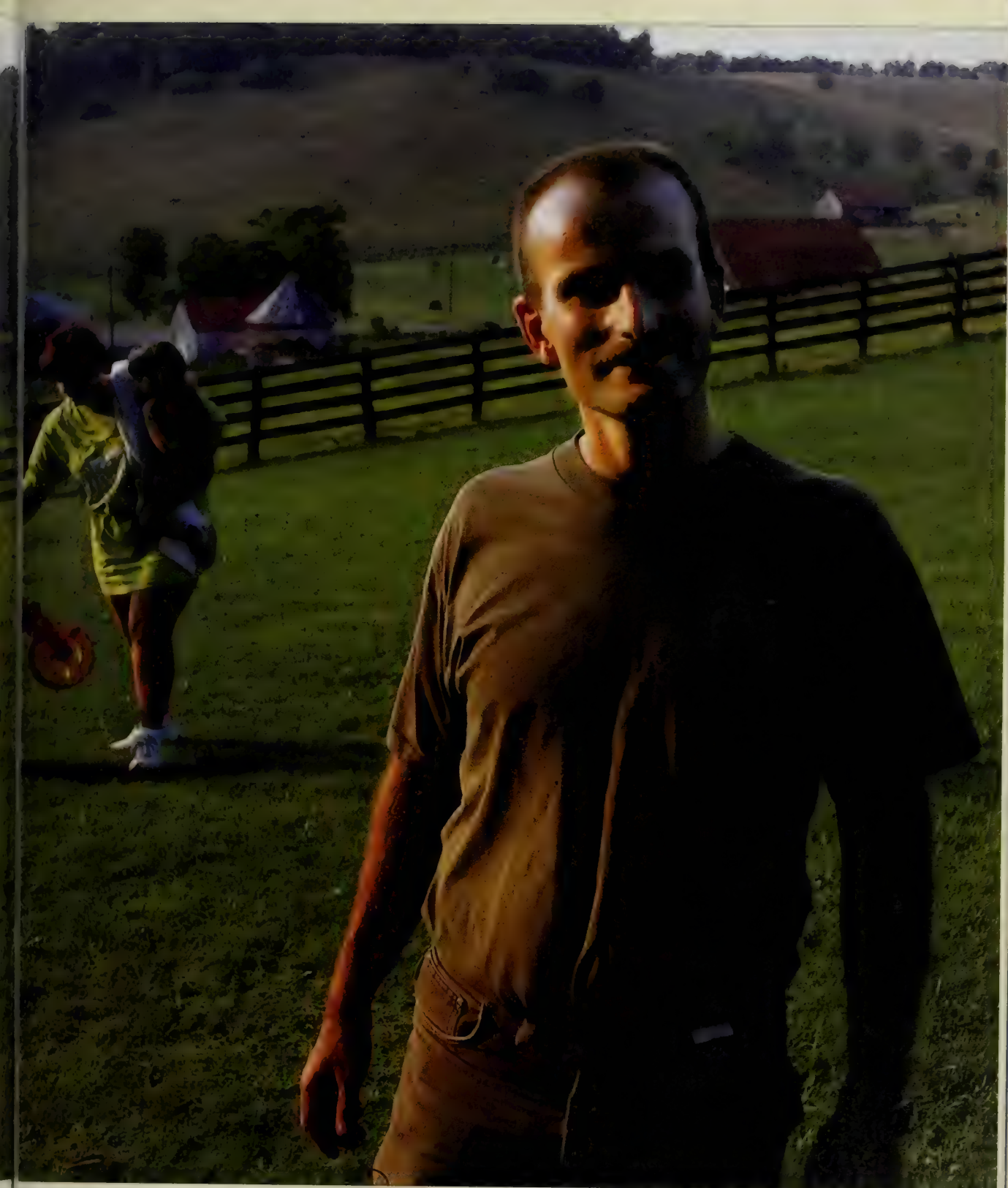
But the Internet has begun to strain those accommodations, Price fears, creating new divisions that seem to make all the other

gaps grow wider. It all started in 199 when the Internet first came to neighborhood, and relatively prosperous, Blacksburg Virginia Polytechnic Institute & State University sponsored an ambitious project to wire up the area, creating the Blacksburg Electronic Village (BEV). Price hoped then that the effort might help to bring diverse town and country folk together in ways the

GOT NET

Despite its bucolic look, Blacksburg is the most wired town in the nation





physical proximity never had. But some seven years later, the dream has yet to materialize—most folks outside Blacksburg are still waiting for a meaningful connection. Says Price: "I've been feeling left behind."

Blacksburg and Prices Fork, though both in the same county, might as well be in different time zones. They offer a glimpse of a world where the Internet is supposed to be a force for equal opportunity. Instead, Blacksburg reinforces the fact that society faces a digital divide of enormous breadth

FRUSTRATED: John Price gets angry about his second-class connections. "I'm so often tempted to say forget it and turn it off"

(chart, page 191). Blacksburg is the most wired town in the nation. Over the span of only five years, more than 85% of its 36,000 residents, including 24,000 students at Virginia Tech,



have gone online—far above the 32.7% national average. By contrast, in the region surrounding Blacksburg, only some 14% are connected to the Net. In fact, only an estimated 20% even have access to a computer, mostly through schools just starting to install them. The African American residents of low-income Christiansburg, on the other side of Montgomery County, lag even further behind.

I've come to this region to see the effects of this divide and how it might be bridged—not just in Montgomery County, but around the nation. It's an important issue, what with Congress earmarking money for wiring up schools and libraries and urban school districts struggling to keep up with techno-rich suburban schools.

Blacksburg, some 15 miles east of Prices Fork, is on the milk-and-honey side of the digital divide. Main Street looks about like what you'd expect of a bustling Southern college town: a broad boulevard with a Mexican restaurant, a Baptist church, an ersatz British pub, and two neighboring barber shops. But there's a parallel electronic community, invisible unless you're one of the wired.

In schools, stores, houses, and Ethernet-equipped apartment complexes, students, shopowners, businessmen, and professors are using BEV's high-speed Net connections to surf off the www.bev.net home page. They are checking out new releases at

BROTHERHOOD?

Instead of bringing people closer, Jim Price fears, the Net may drive them apart

specials at Hokie House tavern, studying which antibiotics cause pseudomembrane colitis via Dr. Hendrick's search online database, getting a peek at the new necktie collection on the Blacksburg Country Club's home page, and—if they're a member of Virginia Tech's Ugly Old Men tennis team of tired professionals—signing up for the next tournament.

Chris Cornelius, a graduate student in Virginia Tech chemistry department, and his wife, Theresa, are typical members. They just saved \$500 on washing-machine repairs and \$600 on rental trucks by price-shopping online for services—all thanks to a BEV.net connection and its \$8.90-

the Moovies video store, posting apartment-for-rent notices on the bburg.for page, learning about the \$2 back-to-campus “fatty mug” beer

month unlimited access fee, a deal available to folks outside the university.

Then there's Lori Atwater, a 39-year-old single mom. BEV has changed her life. A city meter maid for 10 years, Atwater was making \$6 an hour until she used her son's computer and cheap BEV connections in 1996 to start teaching herself how to design Web pages for a living. Last year, after designing most of the city government's Web sites in her spare time, Atwater quit her job and became



resident of Lori Atwa-Enterprises, a new page design company she runs from her se—at triple her pre-salary. “I do now at I love,” she says. giggles, and I ask. She tells me it’s be-cause she suddenly “feels a TV evangelist” use job it is to preach gospel of the Net. is so odd to be doing something you love,” At-er explains. “To get l to do what you love privilege.”

Over coffee at Gillie’s College Avenue in

Blacksburg, known for its Tofu Tortillas, Robert Heterick, the founder of the Blacksburg Electronic Village, fills me in on the history. Bearded and clad in khakis and loafers, Heterick still looks like the engineering professor he was when he envisioned BEV back in the late 1980s as a way to boost Virginia Tech’s standing on the academic roster. The school wanted to find a way to get the city, the state, and Bell Atlantic to help pay for the installation of high-speed fiber-optic cable, which the campus would need to grow and attract engineering students and faculty in the years ahead. He thought that if we could provide access to everyone in the county, cheaply, then everyone would get wired,” he says. “We were naive.”

While the Net can bridge geography, he says, it hasn’t done so well bridging the divisions of race and class. In Blacksburg, mostly white and mostly college educated, “the biggest surprise to me was how local the BEV has become,” says Heterick. “Rather than use it to go beyond the immediate community and help teach folks outside to get onto the



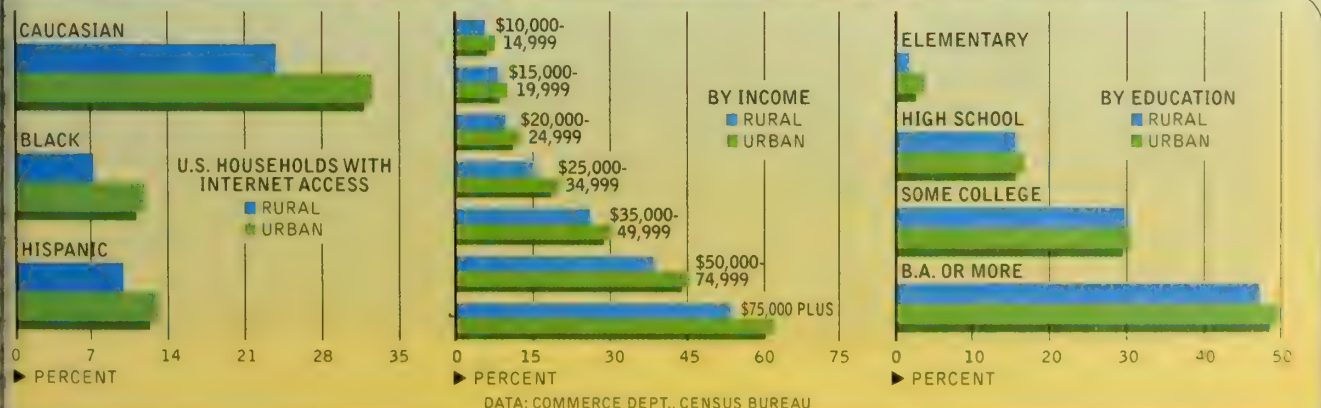
SHUT OUT: Penny Franklin (right) finds BEV cold to outsiders. “We’re on the outside looking in”

BEV, most people have used it to build a new one right here.”

BEV Director Andrew Cohill acknowledges a shortage of

outreach. Early efforts by BEV to “proselytize” on the merits of the technology and diffuse it to communities outside Blacksburg weren’t frequent or successful. People in Blacksburg “had the education to be curious about it all and had heard of the Internet, even in 1993,” Cohill recalls. But folks outside the town were in the dark, and many still are. “We could pick any county in Southwest Virginia and dump \$50,000 of equipment on them and say, boom—here’s an electronic village, but unless people out there have an understanding of what this technology is and why it might be important to them, the stuff is not going to make a bit of difference,” Cohill says. And Virginia Tech, he says, doesn’t have

WIRED AMERICA: WHITE, URBAN, AND COLLEGE-EDUCATED





PEOPLE IN

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CALIFORNIA

are always looking

FOR RADICAL

NEW WAYS

TO GET AROUND

If it's new and it's got wheels, chances are it came from Southern California. People here aren't just content to walk; they'd rather pedal, skate or scoot.

Maybe it's great weather that inspires Southern Californians to design so many ways

The Prius hybrid vehicle



Toyota's design center, CA

to get out and about. Or maybe it's the wide-open spaces. Whatever it is, innovation is no stranger to the roads and pathways of this beautiful corner of the world.

It's probably no coincidence, then, that the design for the world's first mass-produced hybrid vehicle was developed in Southern California. In Newport Beach, to be precise, at Toyota's futuristic North American design center, known as Caltex.

Here, a team of designers created the look that is already turning heads overseas for Toyota's breakthrough alternative fuel vehicle, the Prius.

Caltex is part of Toyota's global network of operations. It's a network that includes facilities in 25 countries and provides jobs and growth in communities around the world.

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Local investment helps Toyota develop vehicles that are suited to the special needs of the communities where we do business. It's not such a radical idea, even if sometimes the results may seem that way.

TOYOTA People Drive Us

the budget or the charter to train everyone in the region.

Outside Blacksburg, though, people need that support. That afternoon, I drive out to Christiansburg, a working-class town on the edge of Montgomery County. There, nearly one-third of adults have no high school diploma and only 17% have college degrees—versus 61% in Blacksburg. Penny Franklin, a 41-year-old single mom, forklift operator, and president of the local branch of the NAACP, worries that her African American community won't have the skills to move forward in the Internet economy. She meets me at the local community center on High Street. Inside, in a large room fitted with folding chairs, an old upright

piano, and photographs of Booker T. Washington, the Reverend Martin Luther King Jr., and Frederick Douglass, Franklin compares Blacksburg's Electronic Village to what she imagines an Alpine village to be: "All nestled in the middle of steep hills, their own little community, and when somebody strange comes in looking for help, everybody runs inside and looks out the window while they're there instead of opening the doors." Franklin recently decided to run for a spot on the school board after her son and other minority children were subjected to race-baiting at the local high school. But another big worry is the lack of tech training and community outreach from the Blacksburg Electronic Village.

There was a time, at the beginning of BEV, she says, that people here hoped that Blacksburg's high-speed connections, hardware, and training could help their children become familiar with the Web. But in 1996, BEV sold the bulk of its Internet service to a private company and stopped offering training and its \$8.90-per-month, unlimited access to folks outside the university. The regular fees of \$32.50 are pretty steep for the people in Christiansburg. "We felt kicked out of the village," she says.



DISTANCES

**Bridging
geography
is not the
greatest hurdle**

Getting back is an uphill battle. Thanks to a regional community group organized by

Christiansburg-based Voluntary Action Center, a group of community activists, the NAACP offices got two computers a year. But there was no money for training, and the equipment just sits upstairs neglected. Part of the problem, Franklin admits, is a lack of interest: "Many folks here don't see why they should take the time to learn it, and many folks here don't know enough to teach them." The lesson: Making equipment and Net connections available isn't enough.



ANXIETY: Cathy Wall worries that her daughter, Kadie, is falling behind kids who have Internet access

The Internet haves must find a way to introduce folks to technology and then to make access meaningful to those without. It's the difference between giving people a book and teaching them to read.

Over on Walnut Creek Road, just outside Prices Fork, Cathy Wall is also worried that her daughter, Kadie, is falling behind. Prices Fork Elementary School has six computers in the library, but computer training is not yet part of the curriculum and Wall worries that children there won't be prepared to compete for jobs with students from more wealthy schools. "Already, we hear that families in Blacksburg are helping their children do homework at home, after school using the Internet," she says. "We don't know the Internet and we don't have a computer at home because we can't afford it." The Walls had to choose between a computer and getting

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Kadie braces. The braces won this year.

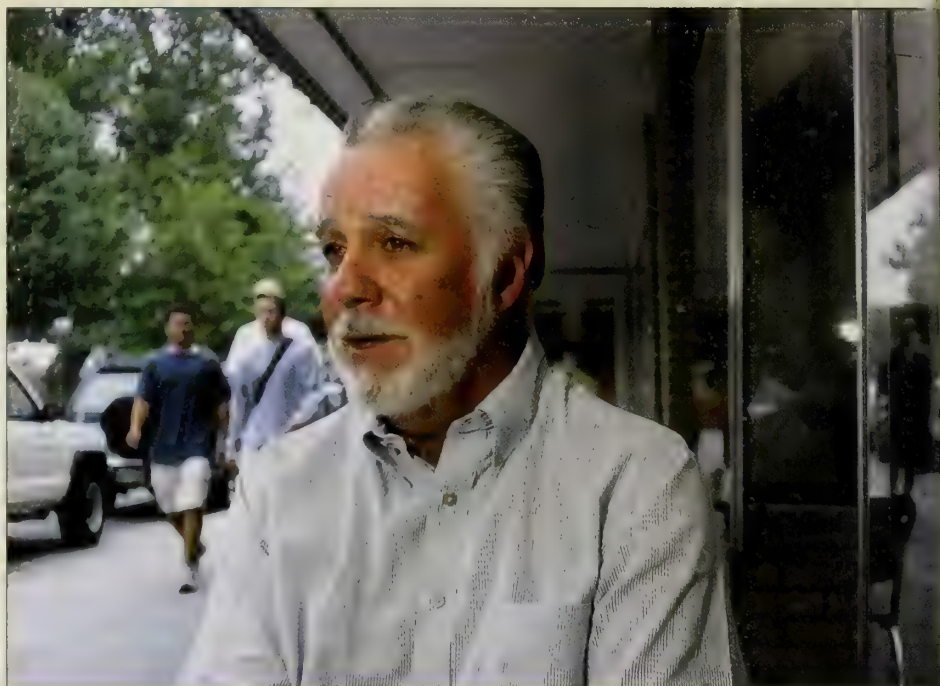
John Price over in Sinking Creek vows he won't be left behind. The first time I meet Price, it's on the porch of the Sinking Creek General Store, a gas stop along Highway 42 in the heart of cattle-farming Appalachia. He's wearing overalls, soiled at the knees, and workboots still caked with fresh mud and cow dung. Like the preacher out in Prices Fork, he's another Price tied to the clan that founded the region.

But this Price has crossed the divide. Unlike any of the other Prices he knows, John joined the U.S. Marines, saw the world, and fought in the Persian Gulf War. Now he's the first one around for miles with a computer at home and an Internet connection—a purchase he made as soon as he could afford one two years ago. He realizes his engagement with this technology has been, and will continue to be, no easy battle: BEV.net's high-speed connections don't reach him, his aging equipment is memory-short and slow, and his Net connections, from a rural provider nearby, aren't always reliable.

Price frequently gets frustrated at the second-class connectivity he has as a result of where he lives, the family's income, and his lack of computer skills. "I'm so often tempted to say forget it and turn it off," Price says. But he's determined not to let his struggles hurt his children, 8-year-old Zak and 3-year-old Carly. "I remember my grandmother kept resisting and resisting having a mechanical washing machine because she didn't believe in them," Price says. "I don't want my children to have the same mind-set about technology."

I accept his invitation to return to the house the next evening, my last in these parts, to meet his wife, Dena, his high school sweetheart. When I drive up the dirt road to the farm, I find John feeding a wood-burning stove that he has rigged up out back to heat water for the house and the children's baths. Back in the barn, we watch Zak feed one of his calves, and after I make a feeble attempt at it myself, Price invites me into the house to show me his computer and collection of Web bookmarks, which include an array of anti-Saddam Hussein sites, various tractor-equipment catalogs, and the home page for the U.S. Marines.

Price's computer is a family affair. One of Zak's favorite sites is eBay, because his mom bought him a Mario book bag



EARLY DREAMS: BEV
founder Heterick thought
everyone would get wired.
"We were naive"

there recently. "The computer was the big chase two years ago," Price says. "Last year was a new floor and countertop for the kitchen. Next year, he says, it will be storm windows. Maybe the year after it will be a newer computer but he doubts it.

For the next few hours, Price and I share what we know about the Net, trading favorite Web sites. I give him tips on how to short-cut some of his Web searches, and show him some sites that Zak and Dena might find interesting. We get to talking about how the Web can fit into life on a farm—and in Manhattan. We talk about the Net's promise and how remote it still seems here. "Folks don't even know they're disconnected," he says, "and they mistrust people who are."

By the time the conversation winds down, Dena has gone up to prepare supper and the kids have been put to bed. They invite me to stay for dinner, but it is late, and I get to leave. "You don't seem like a Yankee," Price says. After Price and I exchange e-mail addresses and vow to stay connected, I drive off under a full Virginia moon, heeding

OUTLAND
"Folks don't
even know
they're
disconnected"



the members of BEV and those looking in from the outside. It's clear that plunking a bunch of computers and modems in a community won't solve the problem. Training, computer literacy, and community outreach are also necessary if towns like Prices Fork are to be brought into the Internet Age. And perhaps most of all, the outsiders must be given reasons why the Internet is relevant to their lives and work.

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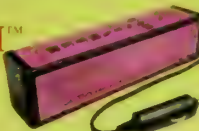
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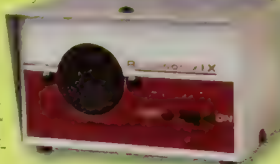


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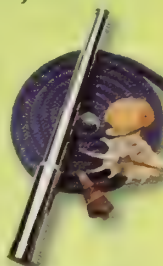
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SOFTWARE WILL STRENGTHEN TIES WITHIN COMMUNITIES • BY NEIL GROSS

Toward the end of the 1990s, a loose-knit community of programmers with limited financial resources took on the world's most powerful software companies—and triumphed. Known as the open-source movement, the

freewheeling confederacy grew up on the Internet. Unbound by geography or time, it has used the new communications medium as both a laboratory and a launchpad for high-quality programs such as Linux, Apache, and Perl that compete head on with Microsoft, IBM, and Sun Microsystems. The movement has spawned a whole new set of rules for the world's \$150 billion software industry. And it has established a new model of how people can live and work online.

It's fitting that a band of programmers should blaze trails for online communities. Teams of engineers designed the Net to transcend crass physical limitations. Once this ethereal infrastructure was laid, waves of homesteaders arrived: physicists chasing data on quarks and black holes, religious fanatics, revolutionaries waving every known political banner, children looking for cyber playmates on the other side of the planet. With traditional communities weakening in a fast-

paced world, the Net offered a potent way to form new bonds based on pure intellectual affinity.

But the Net's early pioneers learned a painful lesson: In a world of infinite electronic choice, it can be extremely difficult to connect. How do you find a handful of like-minded souls in a global pool of 10 million Netizens? Facts and data are readily available. But today's best search engines can't sift through a thousand newsgroups and message boards for a discussion thread that will inspire you or guide you to a community of your peers.

STILL CAVE DWELLERS. Fortunately, dozens of research labs and Internet startups, stretching from the Massachusetts Institute of Technology Media Laboratory to the University of Tokyo, are on a mission to improve life on the Internet. Within five years, software will take much more accurate soundings of who you are and what you seek. New programs will let strangers on the Net appraise one another—whether they are

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looking for expert advice or buying and selling goods. Other software tools will make it easier for members of a group to wander the Web together, untethered to a particular portal, mailing list, or message board. Human voices are already augmenting text in chat rooms. Next, for Netizens who seek intimacy—not anonymity—video will provide human faces for online personas. Until these tools reach maturity, however, Net communities will remain in the Stone Age. Says Steve Larsen, senior vice-president of Minneapolis-based Net Perceptions, which pioneered the first wave of software that recommends books and music at Amazon.com and CDNOW: “At this stage, we’re all still sitting around the fire in loincloths holding clubs.”

The new tools can’t come soon enough for Michal Plume, a mother of four who runs a small business from her home in Palo Alto, Calif. Worried about declining standards in the local school system, she spent much of the mid-1990s debating issues in education news groups, organizing mailing lists, and struggling to find or forge a community that could influence haughty high school administrators. “For the longest time, the kids saw only the back of my head,” she says. After many frustrating months, she concluded that “real people who have the information you need don’t join these groups.”

Nor does she expect to find soulmates in the random and repetitive cyberstreets of Geocities, Tripod, Xoom, TheGlobe, and other virtual metropolises. For every lively chat room debate about hot stocks or hunger in Africa, there are hundreds of dead discussion areas, dreary or abandoned home pages, threads that go nowhere, lonely voices in the darkness. “The sense of community has been lost on these sites,” says Emi-

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Gamers can already blast their enemies in shared 3-D simulations. The same technology will let doctors examine patients across the country, plant managers control distant production lines, and scientists around the world team up on complex simulations of hurricanes or black holes.

ly Meehan, an analyst who covers online communities for the Klee Group in Boston.

Yet the raw material for vibrant communities exists on the Internet in spades. There are astounding repositories of poetry and popular culture and expertly moderated bulletin boards. Side by side with the subject quackery are superb e-mail forums, that of the *British Medical Journal*, where physicians from around the world debate everything from organ transplants to euthanasia (www.bmj.com).

In life-and-death matters, virtual communities—for all their flaws—can be a godsend. Parents of dy-

ing children sustain one another in hope and grief. Cancer patients become wise partners to their physicians. “Many of our patients who spend time on the Net are extremely well informed and ask astute questions,” says Dr. Hiram S. Cody, a breast cancer specialist and surgeon at Memorial Sloan-Kettering Cancer Center in New York.

The trouble is, finding jewels on the Net today depends too much on luck. That’s why so many experts in online communities are studying the experience of the open-source movement. This community, which has roots in the early ’70s and comprises thousands of hackers worldwide, swears allegiance to no central portal. Instead, teams of programmers collaborate on dozens of decentralized mailing lists and message boards.

INFORMED CRITICS. They find one another because they understand an emerging set of shortcuts and secret passageways that will one day be common through cyberspace. “What serious geeks do is a predictor for what larger groups do,” says Tim O’Reilly, open-source evangelist and president of publishers O’Reilly & Associates. Out of sheer necessity, such programmers have built some of the best tools to locate high-level discussion and to refine useful information from the random noise on the Net.

To watch this in action, visit a bustling technology hub called Slashdot (www.slashdot.org), a unit of technology news site Andover.Net in Acton, Mass. Created by open-source hackers in their early twenties, the site is “required reading,” says Raghu Ramakrishnan, professor of computer science at the University of Wisconsin at Madison. Thanks to a process of continuous peer review, the hottest tidbits from technolo-

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Making the Net Work for You

New software tools will focus searches, link you with your peers, and liberate you from the sea of dumb-pet pages in today's online communities.

SEARCH Today's search engines just scratch the surface of the Web's nearly one billion pages. New software tools go deeper, automatically analyzing the structure of the Web and marking content for easy retrieval.

CONTINUOUS PEER REVIEW How do you find valuable nuggets of data strewn across a million message boards and chat rooms? The best sites are starting to allow participants to rate the content continuously and tag the best portions.

"BOTS" Software agents known as bots help stockbrokers manage transactions at speeds that leave humans in the dust. Bots will soon be commodities, assisting ordinary folk in all chores conducted over the Net.

mailing lists and discussion boards around the world show up on Slashdot's main menu. "This is an organic community that shapes itself, a place where you can discover not just what people claim to be but what others think of their claims," says Ramakrishnan.

Slashdot's band of editors deserves credit. But they also depend on homegrown computer code to help rank input from the message boards. The higher a participant is rated by his peers at Slashdot, the greater clout he or she will get as a judge of others who post comments. "Slashdot's software is all open source, and now a lot of other Web sites are using it," says Christine Peterson, the executive director of the non-profit Foresight Institute in Palo Alto and the one credited with coining the term "open source."

INVISIBLE INK. Hypertext is another trademark of the open-source community—and it's not just those blue highlighted links among static documents. To cut communities loose from portals and news groups, programmers developed software, available for free at www.crit.org, that lets gangs of Netizens annotate any other Web site they visit with the electronic equivalent of sticky notes that only group members can read. Crit.org hasn't tried to popularize its free software, but similar tools and support are available from a startup in Redwood City, Calif., called Third Voice Inc. "The successes of open source will be part of everyone's background culture," says Eric S. Raymond, author of the open-source manifesto, *The Cathedral and the Bazaar* (www.tuxedo.org).

The open-source gang doesn't have a lock

on communitarian technology. At online auctioneer eBay, you can post details—good and bad—about your experience with vendors, who are free to respond. The credibility feedback loop inspires may explain how eBay and other sites attracted a cool \$1 billion in transactions last year.

All these software advances, however, carry the seeds of their own corruption. If continual peer review is the crux of

online credibility, there can be strong incentives to stuff the ballot box. A crooked vendor at eBay, for example, could flood the message boards with spurious testimonials. To avoid such outbursts, "we're putting a lot of effort into making sure people develop reputations online and how they can manage complex, long-term identities," says Judith S. Nath, an assistant professor and community expert at MIT's Media Lab, which pioneered product recommendation software in the early 1990s.

The emergence of sensually rich media on the Net could help resolve some of these issues. Voice-based chat will be followed by video, virtual reality, simulated touch. These formats could foster trust among cybernauts by linking

online personas more tightly to flesh-and-blood individuals.

Trust, indeed, has been a factor in the open-source community's success. Because the movement draws volunteers from hundreds of organizations, members are forced to juggle conflicting loyalties. They must learn to let others tinker with their code and help debug it. Few get rich off the resulting programs, which are mostly distributed free on the Net. But there are other rewards, says analyst Dan Kusnetzky at International Data Corp.—like watching the market share for Linux server software soar from zip in 1995 to nearly 16% worldwide last year.

That's just a glimmer of what online communities can accomplish. As social beings, humans have an irrepressible desire to connect and collaborate. Once upon a time, connection meant church suppers, street fairs, and committee meetings. Now, online groups breach all physical boundaries to share the sorrows of illness, the wisdom of age, the wonder of art. Tomorrow, virtual talk and touch with levels of intimacy that we select from an ever-richer palette. The dream is that this enrichment will make online communities less random. And a rendezvous with friends or colleagues in cyberspace will be as satisfying as any encounter you treasure in the real world. This may well be the ultimate promise of the Internet.



FAST FORWARD

Around the world, the number of people surfing the Net from home will surge from **97 million** this year to **240 million** by 2004. Business users will grow from nearly **53 million** to **180 million**

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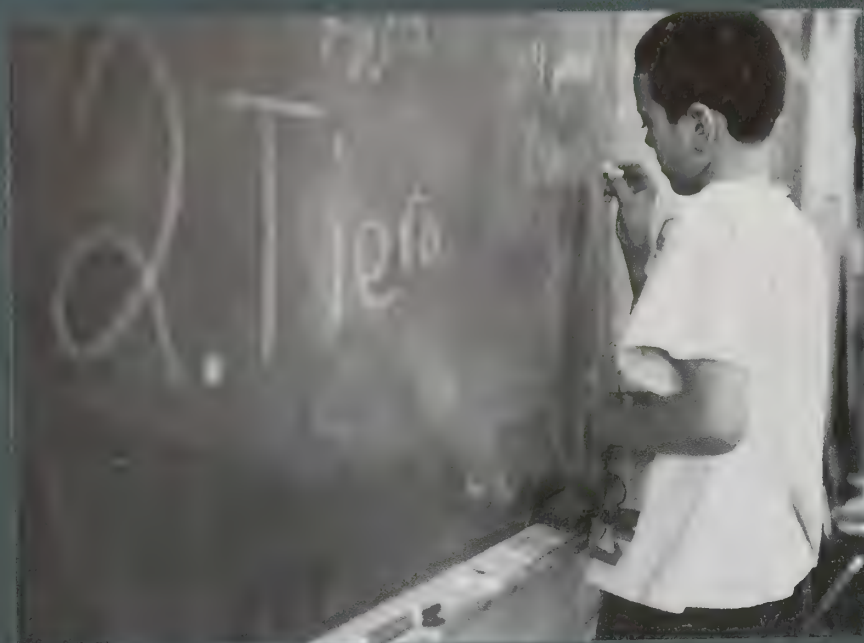


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ECONOMIC LITERACY

Giving our children essential tools for life.



Economic Literacy
Giving our children essential tools for life.

Economic Literacy – The Fourth “R” in Education

IN THE 1950's, the book *Why Johnny Can't Read* caused a national stir. Today we are writing the sequel and it is equally troubling – *Why Johnny Can't Retire*.

ECONOMIC LITERACY: A CAUSE FOR CONCERN

The shocking reality is that Americans – adults and students – know precious little about how our system of economics works and how to work successfully in it.

Last spring, the National Council on Economic Education commissioned a Louis Harris poll to determine the level of economic literacy nationwide.

The poll found that nearly two-thirds of young people and half the adults flunked a basic test of economic literacy. At a time when more people must invest in their own retirement, and are accessing the stock market through the Internet, these findings are disturbing.

This special advertising section, *Economic Literacy: Giving Our Children Essential Tools for Life*, shows how corporate America, working with other stakeholders through the *Campaign for Economic Literacy*, has begun to meet these challenges. For example, next year, Business Week and the McGraw-Hill Educational and Professional Publishing Group will identify 10 schools that will be the recipients of the Eleventh Annual Business Week Awards for Instructional Innovation. These schools will be chosen as best examples of demonstrating how effective economics education works, providing inspiration and encouragement for other schools to follow their lead.

We all share a responsibility to ensure that our young people are educated to confront the challenges that lie ahead as consumers, savers, investors, and workers. Working together we can help to make sure our students are given the skills necessary for success before they leave school.

Terry McQuinn
David G. Ferm

(left) **David G. Ferm, Publisher, Business Week**
and
(right) **Harold McGraw III, President and CEO,**
The McGraw-Hill Companies

JOHNNY is economically illiterate. So is Jill. Neither of them (nor a disturbing number of Americans) know enough about economics to understand the difference between a budget deficit and the national debt. Savings, investments, assets, and equity are all good ideas we'll get around to dealing with "someday." Meanwhile, technology is erasing traditional borders, the world is shrinking, and so are our options to survive and thrive in a global economy.

Economic illiteracy is as much a handicap as not being able to read. Just as no one would question that reading should be included in the definition of a basic education, it is essential that we understand economics should be included as a priority, too. Economics is the fourth "R" in education. There's Reading, 'Riting and 'Rithmetic, and then there's Reality. Economics is reality and it takes more than a passing glance at it to lead a successful life. A widespread, solid grasp of economics ensures that our nation will remain prosperous and powerful and that families and individuals will make good choices and prosper as well.



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We teach reading in school. We ought to be teaching economics in school – not as an elective, but as a requirement. Not as an afterthought, but as core curriculum. Ninety-six percent of Americans believe economics should be part of the curriculum in schools but only 14 states* mandate that the subject be taught as a requirement for a high school diploma. And there are other, more alarming, numbers about the woeful state of ignorance in the general population when it comes to making economic decisions, or even understanding the choices.

Simply put, economics is the study of how individuals and societies make decisions between needs and wants.

We have ignored the fourth “R” of a basic education at our own peril. The consequences of that ignorance can affect everything from national bankruptcy rates to international trade agreements. The bottom line is a severely diminished quality of life.

The solution to the problem will take a sea change in attitude. Americans have to assign the proper value to economic literacy and the way to create that awareness is a national campaign. The National Council on Economic

Education, founded in 1949 to encourage the teaching of economic principles in American schools, has just launched the national Campaign for Economic Literacy. The Campaign is an ambitious five-year effort to educate people about what’s missing from American education – and why it matters.

WHAT IS ECONOMIC LITERACY?

“Money is always there, but the pockets change.” Gertrude Stein distilled the reality that is economics into one line. Whether the pocket belongs to a person or to a nation, it’s crucial to know how money travels and how the allocation of resources affects the availability of those resources.

Simply put, economics is the study of how individuals and societies make decisions between needs and wants. Those decisions are complex, whether they are made by families, communities, or nations. People can decide how to allocate resources implicitly or explicitly, but the decisions are always made. Even a decision by default has its consequences.

Economic literacy is the set of tools that provides an analytical base for decision-making throughout life. These tools help people to choose among the trade-offs that shape their lives each day.

* Alabama, California, Florida, Georgia, Idaho, Louisiana, Nevada, New Hampshire, New York, North Carolina, South Carolina, Tennessee, Texas, West Virginia

AMERITECH

The Goal: To provide teachers with quality economic education and expanded professional development in new technologies.

Plan of Action: Make economics come alive using technology.

Ameritech provides a model for other regions and corporations through its support of technology innovation in classrooms, support for state standards in economics, and educational partnerships that bridge multiple states. In Ameritech’s model, teachers and schools participate in curriculum implementation workshops and in demonstration activities. Workshops provide skills in the creative use of technology – another way to foster economic literacy. The programs capitalize on the National Council’s experience in delivering technology-based educational programs and resources through its EconomicsAmerica® network in the Ameritech region: Illinois, Indiana, Michigan, Ohio and Wisconsin.

Ameritech is a Champion in the national Campaign for Economic Literacy.

“Ameritech is committed to making economics a part of every school curriculum in the Midwest, as illustrated by the number of employees we have active in the Council’s programs and the financial commitment we have made since 1992.”

Mike Kuhlín, senior director, Corporate Relations for Ameritech

For more information about Ameritech in the five states, visit www.ameritech.com/education/commitment/economics.

National Council
on Economic Education

[illegible]



Here's a sample of what economic educators think everyone needs to know¹:

1. You can't always get what you want – opportunity cost.



To get what you want, you must be willing to give something up. Some opportunity costs are made almost unconsciously, such as deciding whether or not to fill up on the bread while waiting for the entrée. Others require more thought, such as how much of your salary you can put towards retirement.

2. Don't sink with a "sunk cost." You've heard of "cutting your losses."

This is about looking at the costs and benefits of a particular situation as it is now – a concept known as marginal analysis. If you buy a candy bar, take a bite, and decide that you don't like it, should you toss the rest or finish it? The price of the candy bar is the sunk cost. It's already gone and you shouldn't include it in your analysis. Your remaining options, the present set of circumstances upon which to make an intelligent decision, equal the marginal analysis.

¹ Based on "Why Johnny Can't Choose," by David S. Dahl, *The Region*, December 1998, published by the Federal Reserve Bank of Minneapolis.

BASIC PRINCIPLES OF ECONOMICS

1. People choose.
2. People's choices involve costs.
3. People's choices have consequences for the future.
4. People respond to incentives.
5. People create economic systems that influence individual choices and incentives.
6. People gain when they trade voluntarily.

3. Remain flexible – understand supply and demand.

Every parent gets this. The hot new Christmas toy gets harder to find and higher in cost as December approaches. But, if the manufacturer suddenly floods the market with more of the toys, profiteers can't sell them for exorbitant prices on the Internet because there are plenty in the stores. Fluctuations in supply and demand can change the choices and behaviors of individuals and groups.

NASDAQ EDUCATIONAL FOUNDATION

The Goal: To recognize outstanding high school teachers for excellence and innovation in teaching economics and promoting economic literacy.

Plan of Action: Nasdaq Educational Foundation National Teaching Awards

This highly visible awards program was developed to spotlight and encourage creativity in teaching high school economics. By recognizing teachers who help students to think, make good decisions, and function in the economy, **Nasdaq Educational Foundation** and the National Council promote and reinforce excellent classroom practices. The awards enhance the Foundation's mission to ensure new generations of well-informed investors, and encourage interest in the financial professions as careers.

The 1999 applications are being judged, and the national winner will be announced at a gala banquet to be held in New York on March 2, 2000. Five regional winners and one national winner will be selected; regional winners will be announced in October. The winning entrants receive prizes of \$10,000 each at the regional level, and the national winner receives \$25,000. Winning entries are chosen on the basis of originality, efficacy, creativity, and adherence to national and state economics teaching standards.

Through this program, Nasdaq Educational Foundation has become a Champion in the Campaign for Economic Literacy.

"As individual savings and investing grow in importance, it is imperative that every young person understand the fundamentals of economics and how it affects our lives. The future belongs to those who have the economic know-how to capitalize on it."

Frank G. Zarb, chairman & CEO, NASD, Inc.

For more information about the teaching awards program, visit www.nationalcouncil.org/nasdaq.

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Economic Literacy
Giving our children essential tools for life.

4. Know relative price to make a relative decision.

The designer jeans you have cherished and worn to ribbons for a decade cost you \$25 new. To replace them will set you back \$75 today. Is this a sensible investment? The only way to decide is to consider how much the cost of everything has changed in 10 years. It helps to understand the function of money, price stability, and money supply. Of course, you can avoid the whole dilemma by comparison shopping and locating a cheaper pair of jeans.

5. Grow with trade.

Capitalism meets the barter system. Specialization means people can make something well at less cost. You can make 10 palm frond hats a day but you have only one head. So you trade the hats for goods that you want and need. Market interaction, competition, and entrepreneurship complicate the simple beauty of this transaction.

6. Public policy affects your pocketbook – analyze the financial implications of your vote.

Most people agree that their elected officials need to understand economics. It is also necessary for voters to understand. The economic policies you support are critical to setting the direction of the nation. A framework for analysis for decisions about the national economy is necessary. The same framework can be used for deciding

among candidates. How will candidate A's position on health care change the quality of the care available to your family, for example? How will a trade agreement result in lower produce prices at the grocery store, or better-paying jobs in your community?



THE CONSEQUENCES OF ECONOMIC ILLITERACY

The consequences of economic illiteracy can be staggering, for individuals and for the nation. There are stark lessons to be learned from the 20th Century. During the 1920's, a thousand economists signed a petition urging Congress to reject the Smoot-Hawley Tariff Act. Congress passed the Act, erecting high barriers to world trade, which deepened a world recession into the Great Depression.

Economic illiteracy increases the probability that a growing number of adults will experience money, credit, and career problems. Young adults are not prepared to become wise consumers, investors, savers, and members of the workforce. Economically illiterate citizens and voters are less likely to make informed decisions.

ECONOMIC LITERACY:

How do *you* score?

These questions were excerpted from the survey conducted for the National Council on Economic Education by Louis Harris & Associates. Test your own economic knowledge. (Answers at the end.) Take the whole quiz on the National Council's web site: www.nationalcouncil.org/cel.

- For most people, the largest portion of their personal income comes from:
 - wages and salaries from their job;
 - interest from stocks and bonds they own;
 - rent paid to them from property they own.
- The resources used in the production of goods and services are limited, so society must:
 - make choices about how to use resources;
 - try to obtain additional resources;
 - reduce their use of resources.
- The stock market is an example of an institution within our economy that exists to help people achieve their economic goals. The existence of this institution:
 - results in an increase in the price of stocks;
 - brings people who want to buy stocks together with those who want to sell stocks;
 - helps predict stock earnings.
- Which of the following are most likely to be helped by inflation?
 - people living on fixed incomes;
 - people who borrowed money at a fixed rate of interest;
 - banks who loaned money at a fixed rate of interest.
- When the federal government expenditures for a year are greater than its revenue for that year, the difference is known as:
 - the national debt;
 - a budget deficit;
 - a budget surplus.

Answers: 1. a; 2. a; 3. b; 4. b; 5. b.

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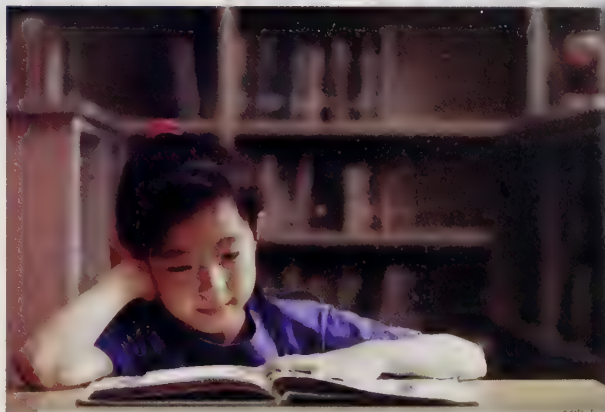
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ECONOMIC LITERACY*Giving our children essential tools for life.***AMERICA NEEDS ECONOMIC EDUCATION**

A recent national survey of adults and high school students, commissioned by the National Council on Economic Education, funded by Merrill Lynch and conducted by Louis Harris & Associates, revealed that we are a nation of economic illiterates. Americans get failing grades on questions about basic economics.

- Nearly two-thirds of those surveyed did not know that, in times of inflation, money does not hold its value.
- Half of adults and almost two-thirds of the students did not know that the stock market provides a venue for people to buy and sell stocks.
- Only 54% of adults and 23% of students knew that when a government spends more money than it raises, that is a deficit. One quarter of those surveyed confused "budget deficit" with "national debt."

According to John T. Dillon, chairman and CEO of International Paper Company and chairman of the National Council's board, the number of "Don't Know" responses is the most troubling evidence from the survey. Dillon notes, "More than 25% of the students don't know that society makes choices about its use of resources. Nearly a quarter of



the adults and 35% of the students don't know they have a role in deciding what goods and services will be produced in the country.

"People who are economically illiterate decide things – important things – by chance. Those who do not have the opportunity to learn economics are shortchanged. People can't work successfully in the world if they don't know how the world works. Economic literacy is the passport to a bright future."

MCI WORLDCom FOUNDATION

The Goal: To provide Internet-based educational materials that would be embraced by teachers, parents, and students alike.

Plan of Action: EconEdLink www.nationalcouncil.org

EconEdLink was developed by the National Council on Economic Education through a unique partnership with **MCI WorldCom Foundation**. Created for Internet use, the MarcoPolo Project provides an innovative approach to educational materials in a well-researched and screened delivery system. The site is used in schools and teacher workshops conducted by the EconomicsAmerica® network of over 300 affiliated state Councils and university-based Centers for Economic Education.

The materials can easily be applied across the K-12 curriculum for math, science, language arts and social studies. The *Economics-Minute* provides a lesson and resources for a topic to be explored in a single classroom session. *NetNewsLine* is an on-line resource for discussion of current topics in economic education. *CyberTeach!* is an interactive guide providing sample lessons and step-by-step assistance for building an Internet lesson in economics. In addition, *DataLinks* provides current economic data for teachers to use in the classroom. EconEdLink also provides links to select web sites reviewed by a Blue Ribbon panel of educators.

MCIWorldCom, a Champion of the Campaign for Economic Literacy, partners with a number of prestigious organizations through its MarcoPolo Project, to provide innovative Internet resources for education.

"The MarcoPolo Project and EconEdLink help teachers develop their students' skills in thinking and solving problems – skills they can use throughout their lives, especially in today's global and technologically-challenging world. EconEdLink safely steers students into the 21st Century of learning through technology."

Bert C. Roberts, Jr., chairman, MCI WorldCom

**National Council
on Economic Education**

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Citibank—encouraging and promoting economic literacy in our schools.

Designed to bring real-world economics into the classroom, The Fed Challenge is a national competition inspired by participating Federal Reserve Banks. Youth teams of high school students develop and recommend monetary policy for the United States. Finalists will present to the Federal Open Market Committee at the Federal Reserve Board in Washington, D.C.

Citibank's sponsorship of scholarships and grants to The Fed Challenge, now in its third year, is one example of our commitment to education. One we plan to continue well into the future.

To participate or obtain more information on The Fed Challenge, call 1-877-FED-CHLG or visit the Web site at www.ny.frb.org. And for more information on education financing with Citibank, go to www.studentloan.com

Economic Literacy

Giving our children essential tools for life

ECONOMIC EDUCATION FOR GRADES K-12

In 1994, the U.S. Congress designated economics as one of the nine core subjects to be taught in America's schools. As a result, the National Council on Economic Education developed the *Voluntary National Content Standards in Economics* for use in economics curricula in the states. Yet, almost five years later, although 39 states include economics in their adopted educational standards, only 27 mandate that the standards be implemented in their schools. Sixteen states require an economics course in the school system and just 14 make it a requirement for graduation.

According to AT&T's chief economist, C. Mark Dadd, "We need to set uniform standards, provide professional development to teachers, create high quality programs to engage students, reach children at younger ages, reward excellent teachers and use technology to extend our reach. We have to be pragmatic about reaching out in the most effective ways."

ECONOMIC EDUCATION FOR EMPLOYEES

The Business Roundtable recently commissioned a study of seven companies, conducted by the National Council, to test employees' knowledge of basic economics. More than 28% of the employees failed to see the connection between their companies' interests and their own. They would have

A SHORT GLOSSARY FOR ECONOMIC LITERACY

Economic literacy – the knowledge and ability to assess problems, make choices, and understand the choices of others as consumers, workers and citizens in local, national and global economies.

Deficit – an excess of expenditure over revenue.

Demand – how much a consumer is willing and able to buy at each possible price.

Entrepreneur – a person who organizes, operates and assumes the risk for a business venture.

Marginal analysis – making decisions based on the impact of the *next* dollar spent, or the change *one more unit* would bring about.

Market – any setting in which exchange occurs between buyers and sellers.

Money supply – currency, checks and deposits that are used to make purchases and payments.

Opportunity cost – the value of the next best alternative that must be foregone when a choice is made.

Price stability – an economy without inflation or deflation.

Scarcity – Insufficient amount or supply. A good or service is scarce if there is less of it than people would like to have.

Supply – how much a producer is willing and able to offer for sale at each possible price.

MORTGAGE BANKERS ASSOCIATION OF AMERICA

The Goal: To provide young people with the economic reasoning and decision-making skills they need to make personal financial decisions in their lives.

Plan of Action: The Economics of Homeownership

Research shows that the American Dream of homeownership is still high on the list for young people. But would-be homeowners do not have the skills to understand the choices necessary to secure that dream. **Mortgage Bankers Association of America**, a partner with the National Council on Economic Education, is underwriting the addition of more personal finance economics to the National Council's web site. These teacher resources will help students understand how to use credit in a responsible manner, to manage their finances well, and to be prudent savers and investors – so they will be better prepared to purchase a home.

NetNewsLine, EconomicsMinutes, and DataLinks will give teachers new lessons and resources. The EconEdLink portion of the project will develop nine EconomicsMinutes, lessons that can be taught in a single class session. They can be accessed through EconEdLink at the National Council's web site (www.nationalcouncil.org). Current information will be added to the NetNewsLine and DataLink sections of the site. In addition, lessons for a new personal finance economic section of the National Council's site are in development. State Councils and state MBAs are also creating partnerships.

The Mortgage Bankers Association of America is a Champion in the Campaign for Economic Literacy. For more information on the economics of home ownership, visit www.economicsamerica.org/econedlink.

National Council
on Economic Education

Aa Bb Cc Dd Ee Ff Gg
Hh Ii Jj 401(K) Ll Mm
Nn Oo Pp Qq Rr Ss Tt
Uu Vv Ww Xx Yy Zz

It's never too early to teach our kids about economics.

Chances are your children are not familiar with 401(k) plans. They are, after all, children. As they grow older, they're going to be faced with a dizzying array of economic options. Whether it's saving their allowance or saving for their retirement, we need to prepare them to make the right choices.

This is why The McGraw-Hill Companies, alongside the National Council on Economic Education, is supporting a campaign for economic literacy. With our expertise in education, finance and business, we can help students become more responsible citizens. As part of America's Promise, we've committed \$2.5 million to bringing our resources and volunteers into the classroom.

We're proud to provide our nation's children with the resources they need to succeed. We're proud to be a part of America's Promise. For more information, visit our Web site at www.mcgraw-hill.com.



AMERICA'S PROMISE
THE ALLIANCE FOR YOUTH™

The McGraw-Hill Companies

Keeping the world up to speed.

The McGraw-Hill Companies is keeping America's Promise.



failed if the survey had been a test. Those are adults who are likely to make poor personal financial decisions.

"I'm living so far beyond my income that we may almost be said to be living apart," wrote the poet e e cummings. That is the distinctly unfunny situation of many working people who never learned economics. Employers are beginning to provide opportunities for their employees to acquire the analytic skills that will increase workers' personal options and keep the workforce competitive.

A NATIONWIDE SOLUTION: THE CAMPAIGN FOR ECONOMIC LITERACY

A coordinated, concerted effort to make America economically literate is what's needed. Armed with those alarming survey results and the recognition of most adults that economics is essential, the National Council on Economic Education launched the Campaign for Economic Literacy through its nationwide EconomicsAmerica® network.



The Campaign meets the challenge head-on with a program of advocacy and educational reform. Its goals and its actions are simple but revolutionary.

What the Campaign will do:

- Ensure that economic literacy becomes a top priority on the education agenda of the nation and every state.
- Expand the effective teaching of high-quality, standards-based economic education into every state and every school district.
- Teach all Americans the economic reasoning, problem-solving, and decision-making skills they need and can use in their lives.

How to do it:

- Elevate economics to the fourth "R," making it part of the core curriculum.
- Give students throughout the country uniformly excellent economic education.
- Develop innovative approaches for reaching the nation's youth and teaching economics.
- Mobilize people to endorse and support economic education in our schools, communities, and the workplace.

INTERNATIONAL PAPER COMPANY

The Goal: To expand teachers' professional development in economic education using new technologies.

Plan of Action: Economics for All Teachers

Through **International Paper Company** funding, the National Council on Economic Education provides support to 30 **Economics-America®** Councils to conduct professional development workshops in the use of the CD-ROM, *Virtual Economics™*.

Virtual Economics™, originally produced with a grant from the National Science Foundation and updated with support from SIFEE and MBAA, provides:

- 30,000 pages of resources for teachers to use in designing classroom lesson plans for grades K-12;
- a gallery of interactive activities to teach the economics principles everyone should know;
- a quick and easy way to select lessons to teach grades K-12 using the *Voluntary National Content Standards in Economics*;
- newsreel footage and films that bring economics to life;
- detailed information about The Stock Market Game™.

International Paper Company is a Champion in the national Campaign for Economic Literacy.

"We at International Paper Company are committed to supporting the efforts of the National Council to expand its reach and grow its excellent delivery system through the national Campaign for Economic Literacy."

John Dillon, chairman & CEO, International Paper Co.

For more information about the CD-ROM *Virtual Economics*, visit www.nationalcouncil.org/catalog.

National Council
on Economic Education



WE'VE ALWAYS SAID THE MIDWEST IS A GOOD PLACE TO RAISE A FAMILY.

Kids need a good environment growing up. Especially if they can grow to over 15 feet tall. So when the International Center for the Preservation of Wild Animals needed a location for an endangered animal conservation and research center, we knew just the place. The Wilds is in southeastern Ohio on more than 9,000 acres of reclaimed, mined land donated by AEP. Supplying a good home for animals like giraffes, rhinos, scimitar-horned oryx and Bactrian camels is another way we're using ideas to make the world better. Ideas with power.SM

To find out more, visit AEP and The Wilds at www.aep.com.

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**Who will do it:**

Partnerships. There is strength in numbers. In order to bring standards-based economic education to our schools, we will have to band together to influence Congress, state governments, and local school districts. The commitment of a variety of constituencies will create the necessary momentum – leadership and vision from educators, corporations, labor, government, and families. We need economic education on the agenda at the next school board meeting – and on the report card at the end of the school year.

Many of the nation's largest companies are already sponsoring programs to expand economic education through partnerships with individual schools, economics fellowships for teachers, and development of high-tech teaching materials.

What you can do:

Get involved with your state's EconomicsAmerica® state Council on Economic Education and/or regional Centers for Economic Education. They lead the development of state economics standards, infusing content and decision-making skills into the K-12 curriculum, and providing professional development and resources for teachers. Get involved with

other economic education non-profits who are Campaign partners, such as the National Academy Foundation internship program and high schools of economics and finance in your area. There are any number of ways you can help, including bringing information to public officials and decision-makers.

Join the national Campaign for Economic Literacy. Organizations and foundations can become Champions through projects and support, and individuals can become Associates in the effort.

Your voice counts. Speak out for a brighter future for our young people. You can be a financial supporter, a communicator, an advocate for change, a parent-organizer at the school board level, a teacher in search of a better curriculum for students, a student who wants that bright future unlocked. The key is economic literacy. Economic education opens minds and opens doors. It's time we made it available to everyone.

You can reach the National Council on Economic Education and its EconomicsAmerica® network of affiliated state Councils and university-based Centers for Economic Education through the Internet at www.nationalcouncil.org, or by telephoning 1-800-338-1192.

THE MCGRAW-HILL COMPANIES

The Goal: To provide educators in grades K-12 with models on how to infuse economics into their curricula and to provide virtual access through the Internet to corporate volunteers.

Plan of Action: Economics in Schools and Virtual Volunteering

The partnership program with **The McGraw-Hill Companies** targets economic literacy through model demonstration projects that provide standards-based economic education for K-12 students in selected school districts across the nation. A key component to the program includes web-based lessons, with virtual connections to McGraw-Hill employee-mentors.

Other aspects of The McGraw-Hill Companies' Program include

- an economics curriculum project with at-risk, inner-city youth at Morris High School in the Bronx (McGraw-Hill's adopted school); and
- in-kind support to the National Council to further the Campaign for Economic Literacy.

The McGraw-Hill Companies is a Champion in the national Campaign for Economic Literacy.

"Economic literacy unlocks the doors to opportunity. Today, the driving forces of global growth and technological innovation are transforming our world and shaping our future. Our young people need to become full participants in the global economy and to create a brighter future for us all."

Harold McGraw III, president & CEO, The McGraw-Hill Companies

For more information about the project, visit www.mcgraw-hill.com/corpinfo/philanthropy/partners.html.

National Council
on Economic Education



*** Our best thinking usually happens out here.**

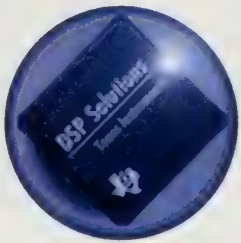
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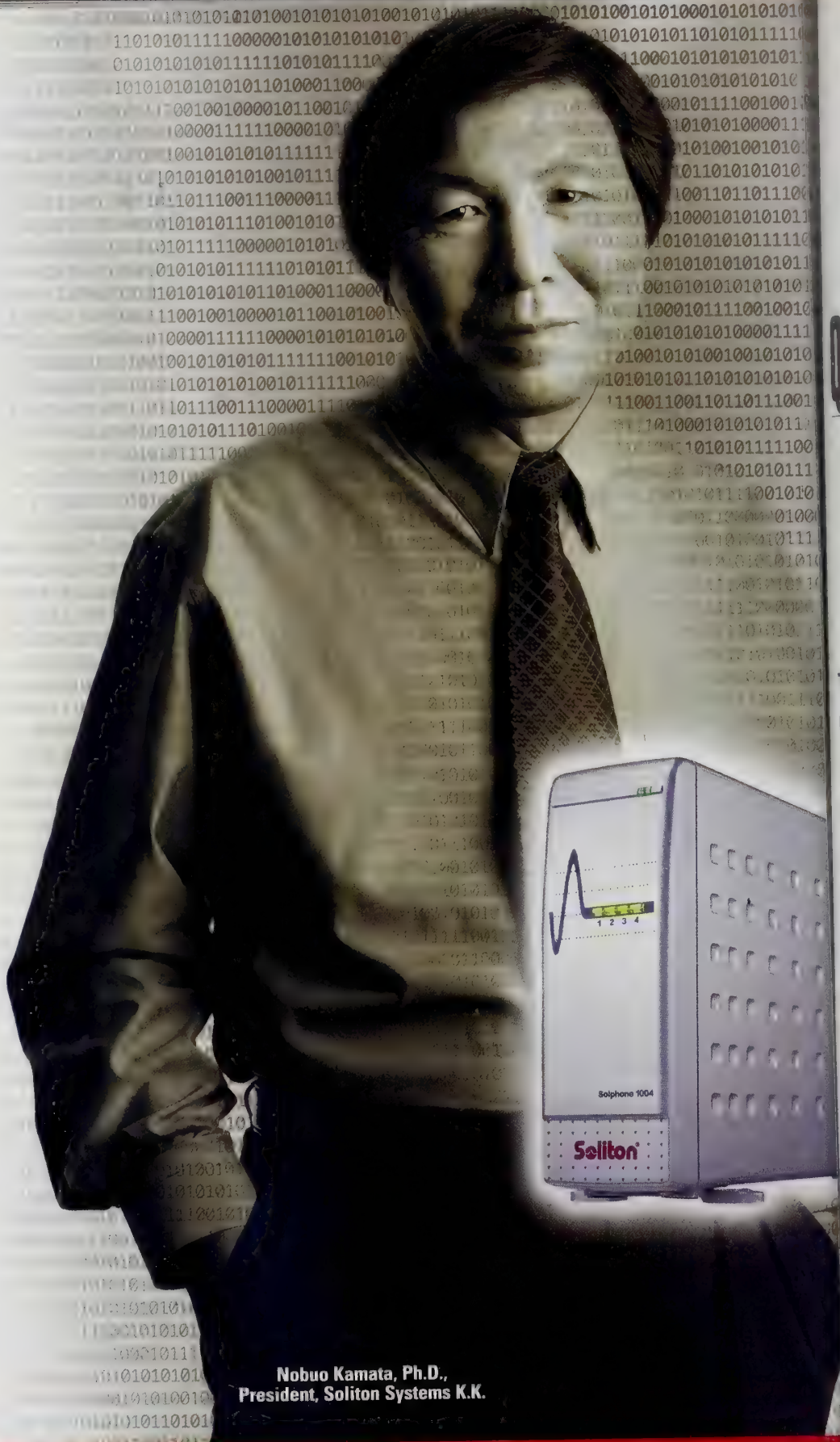


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**Nobuo Kamata, Ph.D.,
President, Soliton Systems K.K.**

T H E W O R L D L E A D E R

HOW SOLITON SYSTEMS QUICKLY CAUGHT THE VoIP WAVE. THEIR CHOICE: DSPs FROM TI.

TI DSPs and third-party software enabled Soliton Systems to rapidly introduce Japan's first* VoIP telephone system.

VoIP (Voice over Internet Protocol) for voice-signal interchanges of transmissions over data networks has been drawing considerable attention. One of the reasons is the introduction of the Internet telephone. Since it can also dramatically reduce long-distance charges, especially international calls, this technology has become a topic of great interest at large companies, as well as to small-office/home-office users.

With its Solphone 1000 series, Soliton Systems K.K. has become the first company in Japan to develop such a VoIP/Internet telephone. All the functions have been consolidated into a compact design. The result: customers in Japan using Solphone 1000s can make telephone calls over the Internet

without the need for special equipment, routers or switches. The TMS320C5000 DSP from Texas Instruments enabled the early market debut of the Solphone 1000 series. A deciding factor in selecting the 'C5000 was the availability of leading-edge, third-party software developed specifically for TI DSPs. That and the unique combination of the high performance, low power consumption and competitive pricing, plus program-mability for a variety of audio processing standards, made the 'C5000 DSP from TI the perfect choice. Let us show you how a TI DSP can be your perfect choice and help you catch the next wave of product innovation.



The 'C5000 platform has become the de facto standard in the field of VoIP. It's driving the fusion of voice and data in the world of communications.



'C5000

Software available from over 250 third-party sources and easy-to-use, highly code-efficient development tools make it possible to cut costs and enter markets fast.



The low-power-consumption performance of the 'C5000 makes it ideal for portable digital products.

www.ti.com/dsp

* First introduced the four-port voice/fax support. H323 standard equipped model in Japan. 16-9189

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To Contact the Campaign

National Council on Economic Education
 1140 Avenue of the Americas
 New York, NY 10036
 or sdowling@eaglobal.org

This special advertising section was written by:
 Dr. Robert F. Duvall
 President & Chief Executive Officer
 National Council on Economic Education

INTERNET-BASED LEARNING

The Goal: To help students understand the functions of a market economy and to help them become informed investors and savers.

Plan of Action: National Council www.nationalcouncil.org
 The Stock Market Game™ www.smgwww.org
 and The Mint www.themint.org

The Stock Market Game™ (SMG WORLDWIDE) is a popular interactive educational tool used primarily in grades 4-12. It motivates learning about economic principles, finance, and the American economic system. Students meet core educational requirements while participating in an exciting, interdisciplinary simulation of the stock market.

The Securities Industry Foundation for Economic Education (SIFE), an affiliate of the Securities Industry Association (SIA), works in partnership with the National Council on Economic Education to deliver The Stock Market Game™. For two decades, the game has helped more than seven million students in the U.S. and in 15 other countries learn how financial markets work and how capital is raised to fund business growth. In most cases, The Stock Market Game™ is distributed through **EconomicsAmerica®**, the non-profit, national network of state Councils and university-based Centers for Economic Education affiliated with the National Council on Economic Education.

The Mint is a new web site sponsored by the **Northwestern Mutual Life Foundation** and the National Council on Economic Education. It is designed to teach middle and high school students financial and economic literacy skills. The site provides on-line information about topics such as budgeting, investing, saving, and spending, and offers quizzes, games, and even a glossary of basic terms.

National Council
 on Economic Education



SHAREHOLDERS: Teacher Murray advises her South Bronx parochial school students

I Want My NYSE: Teens Meet the Market

More and more schools are teaching kids how to invest

BY JOAN OLECK

It's the first week of school at Aquinas High in New York's South Bronx. Floors are polished to a glossy sheen, white blouses and gray skirts are freshly pressed, and students in Ann Murray's G period economics class are encountering for the first time this thing called the stock market. Sure, they've heard of it. But stocks, bonds, and dividends remain largely alien concepts. "I only know what I see on CNN—where [traders are] throwing papers at each other," says Kariba Lang, 16.

That knowledge barrier is about to fall. Murray will soon have her students at this Catholic all-girls school reading stock tables like pros. They'll also be trading shares using real money. This is the sixth year Murray has imbued kids with the ways of Wall Street. Along the way, her pupils have run up a record that should be the envy of more seasoned investors (table, page 230). In-

deed, Murray is one of a growing number of teachers exposing young people to stock market simulations or showing them how to read corporate financial statements. The goal: making them better investors and students of the economy.

Why now? "The impact of the market we're in is that lots more people are interested in investing and saving," says Richard Brueckner, chief executive of the Securities Industry Foundation for Economic Education, which sponsors a popular teaching tool called The Stock Market Game. The game allows teams of students in grades 4 to 12 to invest an imaginary \$100,000 in actual stocks and compete to build a winning portfolio. Some 25,000 schools participate in the 10-week simulation, which is now on the Internet (www.smgww.org).

The Stock Market Game is hardly the only index of growing interest in teen financial education. Jeffery Fox, director of youth education for the National Association of Investors, says a

Kids & Money

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Had anyone with big money invested in the kids' stocks, they "would have made a fortune," says one adviser

push from teacher-members helped prompt his organization to pioneer a home-study course for kids called "Investing for Life." Even Wall Street's traditional institutions are focusing on youth education. Salomon Smith Barney introduced Take Your Parents to School Day in February, featuring a special finance curriculum. Merrill Lynch declared April International Saving Month to encourage savings among kids. And the New York Stock Exchange reports increased participation in its annual teacher workshops.

SIXFOLD JUMP. Yet for all these efforts, only a few add real cash to the mix. In a depressed area of North Philadelphia, teacher David Kaplan set up the Program for Economic Development at Julia de Burgos Bilingual Middle Magnet School and William Penn High School. Kids work in concessions selling food and school-logo items in return for stock. At the end of the semester, they share in the profits.

Murray's investment club in the Bronx began after she had been using a simulation for the stock market, then one day mused: "Wouldn't it be great to really do it?" Thus was born the Aquinas Eco stock portfolio and investment fund.

Murray started by persuading a vice-president she knew at PaineWebber to get the firm to manage the students' portfolio. She raised the \$500 minimum by getting 150 girls and faculty members to kick in \$1 each, and a donor to add \$360. The brokerage agreed to waive its commission and charge only the Securities & Exchange Commission minimum—then \$3.80 a trade, now \$4.50.

Then she set up the Aquinas Eco fund. At the beginning of each semester, students pay around \$1 per share to buy into the fund, whose results mirror the performance of the stock portfolio. When the semester ends, students cash out their shares—at what they

hope will be an increased value. Murray doesn't draw any money from the stock portfolio. Instead, she pays the students out of a cash box that contains proceeds from the original sale. Any shortfalls come from her own pocket.

And boy, have the shares jumped. The portfolio's value recently \$3,361, a sixfold increase over five years. Says PaineWebber broker Craig Biszick, who runs the class: "The stocks the kids sell would have made anyone invested big money with them, would have made a fortune."

The portfolio has had some ups and downs, however, and the fund's shares have ranged from 93¢ to \$1.86 apiece. Recently they were worth \$1.13. At that time they have approached the "stockholders" have voted to split to keep shares affordable. Students are required to own at least one share, but a few have bought as many as 40. If a student can't afford the cost of a share, Murray advances the cash, lets the student work off the "loan" by doing odd jobs around the classroom.

Since Aquinas Eco shares go up or fall depending on the portfolio's results, students feel the impact of their decisions about which stocks to buy and sell. In November, after a spirited debate, they bypassed Dell Computer at 30 1/2% in favor of Compaq Computer at 34 1/2%. Today, Dell is trading at 48%, while Compaq is around 23. They felt much happier about the move to buy one share of America Online the same month at 93%. Shortly after, the stock split and now it's back up around 89. Other winners have been Microsoft, Intel, and Merck, while losers have included Toys 'R' Us and Knowledge Share. The best student move, Murray says, was the decision to reinvest their Microsoft gains in other stocks.

Murray says the investing exercise helps students understand the importance of long-term goals. "What students used to do was go to a check-cashing store and spend an enormous amount to cash their paychecks, then put the money in an envelope or a shoebox." Paychecks disappeared into clothes and CDs. Now, money is saved in a bank account. Paula Washington, a 11th-grade sophomore at City University of New York, chose to keep her 30 Aquinas Eco shares as she graduates. She says she wants to stay connected to Murray until she turns 18 and can "do the real thing" via a broker with money she saved from typing student papers. Then, if she says she's making an educated guess about the stock, you'd better believe her.

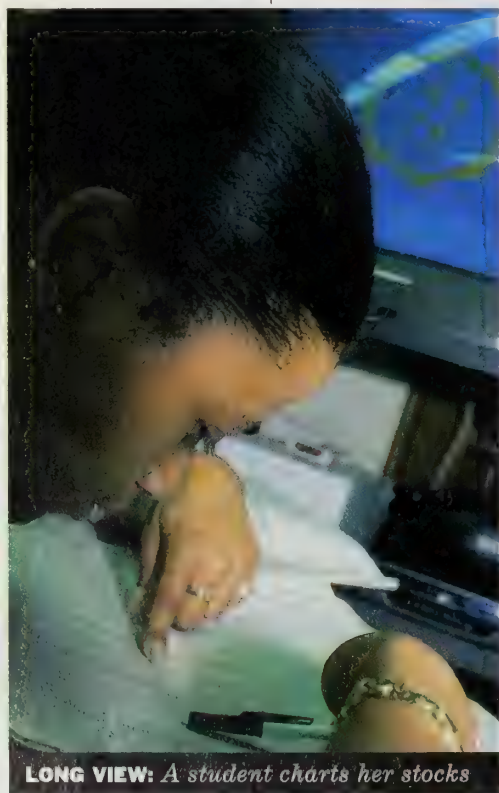


Junior Money-makers

Ann Murray's stock-pickers at Aquinas High School in the Bronx, N.Y., have bested many of Wall Street's stock-pickers. Here's their record:

YEAR	PERCENTAGE
1995	85.9%
1996	10.5
1997	57.3
1998	-11.3
1999*	116.8
Avg. Annual Return	35.2

*YTD DATA PAINEWEBBER, BUSINESS WEEK



LONG VIEW: A student charts her stocks



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Creating a Better Bond Fund Mix

Online tools help you find the right combo

BY JEFFREY M. LADERMAN

Bond funds should be a natural choice for income-oriented investors. But so many funds have disappointed over the years, with their steep sales fees, high expenses, and ho-hum returns, that many people opt for U.S. Treasury notes or investment-grade municipal bonds.

In so doing, however, investors are missing opportunities. How else but in a mutual fund could all but the wealthiest people invest in a pool of adjustable-rate mortgages, a slice of a syndicated bank loan, or a New Zealand government bond? Indeed, if you build an income-oriented portfolio using low-cost funds that exploit these less familiar corners of the bond market, you can achieve a significantly higher yield with only a modest pickup in interest-rate and credit risk.

How much? BUSINESS WEEK constructed a diversified bond-fund portfolio, and its results are gratifying: Had you gone into it a year ago, you could have picked up about 1.7 percentage points in yield over a portfolio of short-term Treasuries. That may not sound like much, but in the bond realm, it's a virtual home run.

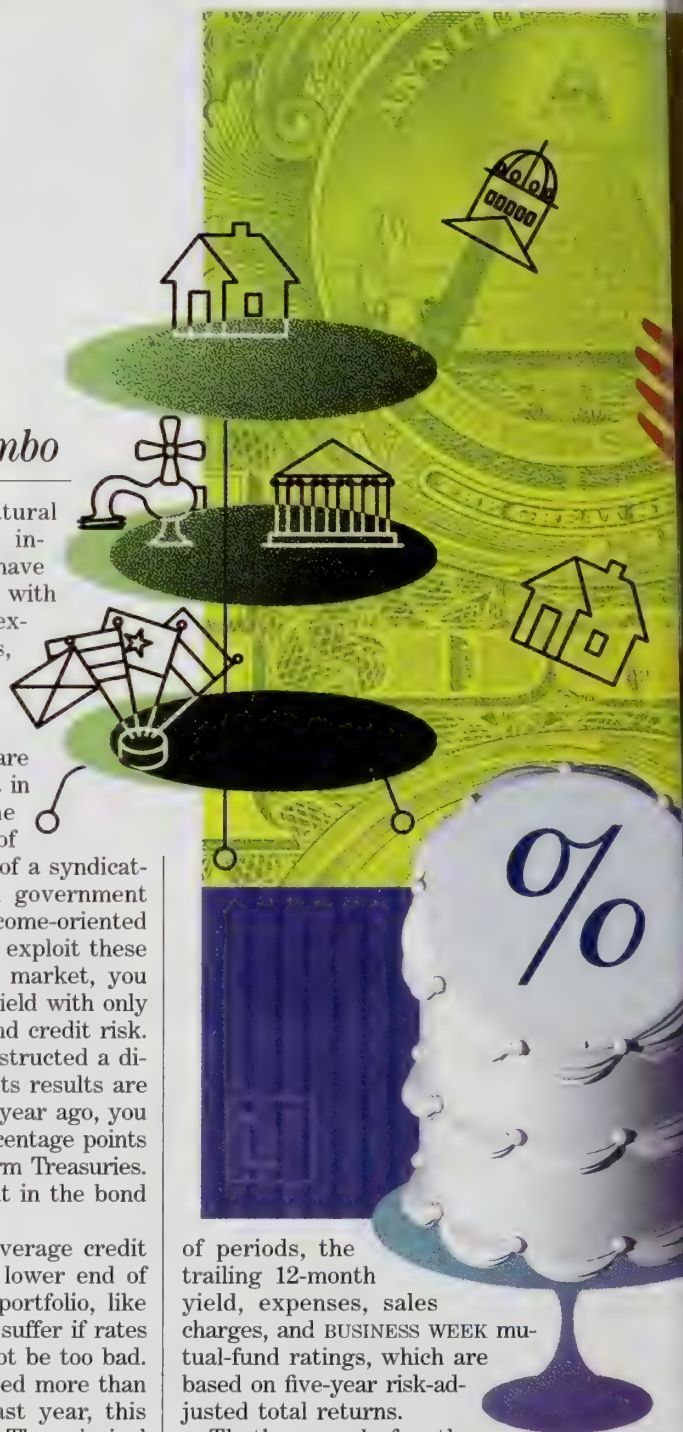
The portfolio we built has an average credit rating of about A- to BBB+, the lower end of the investment grade. Sure, the portfolio, like any fixed-income investment, could suffer if rates move up. But the damage might not be too bad. Even though long-term rates jumped more than one percentage point over the last year, this portfolio lost only 1.6% of its value. The principal on a pure Treasury portfolio would have dropped 2%. We went through a similar exercise with tax-free bond funds and built a portfolio with a 4.84% yield over the past 12 months. That's a little better than 1 percentage point over a portfolio of short-term munis. But alas, the portfolio took a bigger hit to its value than the bonds.

To assemble this sort of portfolio takes some thought and planning, and the tools to sort through thousands of funds efficiently. For example, visit the Interactive Mutual Fund Scoreboard at Business Week Online (go to www.businessweek.com/investor/, then click on Mutual Funds). Once there, you'll be able to sort funds by category and check total returns for a variety

of periods, the trailing 12-month yield, expenses, sales charges, and BUSINESS WEEK mutual-fund ratings, which are based on five-year risk-adjusted total returns.

That's enough for the first cut. But you'll want to go deeper, getting a look at the credit quality of a fund's bond holdings and its sensitivity to changes in interest rates. The BW scoreboard also has links to Morningstar.com's "QuickTake" pages, which contain that information.

CORE POSITION. You also need to know what you're trying to build—a portfolio that tries to squeeze out the most yield for the least risk. A high-yield bond fund is going to be a core position, because of its generous payout. But you'll need to offset the fund's credit risk with a like position in a high-grade fund. For true diversification, you'll also want to add smaller allocations in areas such as international bonds, mort-





12 months, the fund has earned a 14.38% total return and a 10.22% yield. That's not a guarantee of future returns, but its history shows it's usually a leader in high-yield. The average credit quality of the bonds in the portfolio is B (BB is the highest rating among high-yield bonds), so you are taking on credit risk. But Fidelity's high-yield research staff is among the largest and best in the fund business.

ROCK-BOTTOM. To offset the high-yield credit risk, we allocated 25% to Vanguard GNMA. Ginnie Maes—the main ingredient of this fund—are government-backed mortgage securities. Their credit quality is nearly as good as Treasuries, but they pay a higher yield. True, they're interest-rate sensitive: Over the last 12 months, the fund's principal lost value. But the yield was high—6.76%. Vanguard's rock-bottom expenses are another plus. Indeed, another Vanguard fund, Vanguard Total Bond Market Index, would also make a good choice for this slot.

Then we put 15% in an international bond fund. Such funds can be scary if they buy emerging-markets bonds or take foreign currency bets. But Payden & Rygel Global Fixed-Income does neither. It's big on high quality—German government bonds are major holdings—mainly hedges against adverse moves in the dollar. The fund also adds diversification, as moves in overseas bond markets don't always correlate with America's. Over the last year, Payden & Rygel's yield was 7.78%. The fund rates BUSINESS WEEK's A ratings, both in comparison to all taxable funds and to those in its category.

We filled the rest of the portfolio with "ultrashort" funds. This is one area where interest-rate risk is minimal, but so are the yields. That's why the funds we choose are those that demonstrated an ability to uncover a little extra yield. They are Strong Advantage Fund, to which we give a 15% allocation; Asset Management Adjustable Rate Securities, 10%; and Eaton Vance Prime Rate Reserves, 10%.

Strong Advantage invests in instruments that are too long in maturity for a money-market fund and too short for a short-term fund. The fund keeps its average maturity below one year and seeks out undervalued securities. One minus: The average credit quality is just A. We

Had you gone into BUSINESS WEEK's bond-fund portfolio a year ago, you could have picked up 1.7 percentage points in yield over a portfolio of short-term Treasuries

ge-backed securities, and assorted short-term instruments.

For our taxable portfolio, we started with a 25% allocation to Fidelity High-Income Fund. The fund sports a BW rating of A when compared with all taxable funds, and an A when measured against its high-yield peers. Over the

The Right Stuff for Your Bond Fund Portfolio

TAXABLE

FUND	ALLOCATION	12-MO. YIELD*	TOTAL RETURN**
FIDELITY HIGH-INCOME	25%	10.22%	14.38%
VANGUARD GNMA	25	6.76	0.78
PAYDEN & RYSEL GLOBAL FIXED-INC. R	15	7.79	1.90
STRONG ADVANTAGE	15	5.80	4.43
ASSET MANAGEMENT ADJUSTABLE RATE	10	5.41	5.66
EATON VANCE PRIME RATE RESERVES	10	6.56	6.32
AVERAGE		7.48	5.84

TAX-FREE

FUND	ALLOCATION	12-MO. YIELD*	TOTAL RETURN**
DREYFUS SHORT-INTERMEDIATE MUNI.	20%	4.13%	2.74%
SIT TAX-TREE	20	5.02	-0.51
STRONG HIGH-YIELD MUNI.	20	5.90	-1.05
USAA TAX-EXEMPT INTERMEDIATE	20	5.44	0.13
VANGUARD SHORT-TERM TAX-EXEMPT	20	3.75	3.03
AVERAGE		4.84	0.89

* Based on fund distributions, Sept. 1, 1998-Aug. 31, 1999

** Appreciation plus reinvestment of dividends and capital gains DATA: MORNINGSTAR INC., BW



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also took on credit risk with Eaton Vance Prime Rate Reserves, one of several prime-rate funds (box). These funds invest in syndicated bank loans whose interest rates are reset every three or six months, so rising rates don't hurt the principal. There is credit risk, but you get paid to take it—the yield over the last 12 months was a tidy 6.56%.

PLUMPER YIELDS. For the final piece, we offset the credit risk in the Strong and Eaton Vance funds with Asset Management Adjustable Rate Securities. Unlike other funds of this type, Asset Management buys private as well as government-backed securities. Its average credit quality is AAA, and it sports a 5.41% yield for the last 12 months.

For a tax-free portfolio, the job is a little trickier because the muni-fund market is not as diverse as the taxable. But the building plan is the same. Buy two funds that invest in intermediate maturities, two in shorter maturities, and that takes on high risks.

Whether you choose taxable or muni funds, keep an eye on your allocations to make sure they don't get too far out of line. If you get capital gains distributions, plow them back into the fund—that helps maintain the portfolio's tax base. And you need to keep up with the funds' performance to make sure you're getting the best risk-adjusted returns in the sector. With some effort, you should be rewarded with a plumper yield.

PRIME-RATE FUNDS: READY FOR PRIME TIME

Money-market funds preserve your principal, but the yield is low: only 4.6% over the last 12 months. If you could live with a little fluctuation in net asset value (NAV), however, you could earn two percentage points more yield. That's the pitch for "senior loan" or "prime-rate" funds.

You won't find them at the no-load fund companies. Eaton Vance and Van Kampen Investments are among the big players. There are no upfront loads, but sales charges are levied via higher expenses. Even with a 1.4% average expense ratio, yields are still appealing because they're reported net after expenses.

These funds buy pieces of loans that banks make to major corporate borrowers. The interest rate resets every three to six months at a fixed amount—now an average of about 2.6% over the rate that international banks pay on overnight loans. So the funds are sheltered from principal loss due to rising rates. That means there's not much change in NAV. Since 1989, shares of Eaton Vance Prime Rate Reserves Fund have ranged between \$9.95 and \$10.07.

Of course, you don't get extra yield without any risk. The loans



are made to companies whose bond ratings are below investment grade. But unlike junk bonds, the loans are secured by corporate assets, such as accounts receivable, inventories, and properties. And they're "senior," meaning lenders get paid before bondholders.

"Until the secured creditors are finished eating, no one else gets a bite," says Scott Page, who, with Payson Swaffield, manages senior loan funds for Eaton Vance.

To mitigate trouble with any one creditor, the funds diversify. Eaton Vance, for instance, has 364 companies in 66 industries. And there have only been 15 defaults in its 10-year life. But even then, the fund has recovered about 80% of what was owed. "We've been tested and we know it works," says Swaffield.

HIGHER YIELDS. Prime-rate fund investors have to give up some liquidity. You can put money in any time, but you can withdraw it only quarterly.

That's because the funds' investments cannot be immediately turned to cash.

Those who want liquidity can buy an exchange-traded closed-end fund—Eaton Vance Senior Income Trust, Pilgrim Prime Rate Trust, Travelers Corp. Senior Loan, or Van Kampen Senior Income Trust. These funds can be sold anytime, but not necessarily at NAV. Pilgrim recently traded at a 4% premium, but Travelers was at a nearly 7% discount.

The closed-ends also leverage their portfolios, so they offer higher yields. In either format, prime-rate funds look like the nearest thing to a free lunch: a high return with just a bit of risk to your principal.

Jeffrey M. Laderman

Prime Opportunities

	12-MO. YIELD*
AIM FLOATING RATE	6.97%
CYPRESSTREE SR. FLOATING RATE	6.64
EATON VANCE PRIME RATE RESERVES	6.96
FRANKLIN FLOATING RATE	6.46
MERRILL SR. FLOATING RATE	6.64
MSDW PRIME INCOME	6.92
VAN KAMPEN AMERICAN CAPITAL PRIME	6.60

*As of Aug. 31

DATA: MORNINGSTAR INC.

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ROOM TO GROW: Ellis sees his fund hitting \$700 million someday

It's a Tech Stock? Bring It On!

Craig Ellis keeps a wide portfolio. It serves him well

Defining technology broadly has been a winning strategy for Craig Ellis, whose Orbitex Info-Tech & Communications Fund is up 70% so far this year after jumping 52% in 1998. Its 5.75% sales charge would have clipped about nine percentage points off this year's return to a hypothetical investor. That will turn off many do-it-yourself fund pickers, but others still may want to tune in to how Ellis, a former telecommunications analyst, sees the market in tech stocks. He spoke recently with Senior Writer Robert Barker. Some excerpts:

Q: Why is the fund up so much?

A: Diversity. The Internet played a big part in it the first part of the year. But that was only a portion of it. In the wireless-communications arena, Omnipoint was a big hit for the fund. In the networking area, the buyout at FORE Systems was a big hit. And January's buyout of AirTouch Communications was a big hit. So it has been across the space of network systems, Internet, and communications services.

Q: In market caps, too, I see. You've owned mega-caps such as AT&T and little stocks such as JDS Uniphase.

A: Exactly. The only thing I tend to

stay away from are micro-cap stocks that have much of a following.

Q: So what have you bought lately?

A: Oracle is a big name. That's the last thing we started adding back in midsummer. Oracle, Microsoft, Intel. We're ramping back into Sun Microsystems. And there was another area we went after very hard—the work-infrastructure group: Juniper Networks, Extreme Networks, and two new names to the fund, F5 Networks and Packeteer.

Q: Let's take those last two in turn. Why would you buy that?

A: [It] came to me via another holding, Extreme Networks, [which] makes a switch that competes with Cisco Systems'. F5 showed up as a major component supplier to Extreme. We added it around \$64 a share.

Q: How about Packeteer?

A: Packeteer is about network bandwidth management tools. When corporations are trying to get these data networks connected to the Internet, they run into bottlenecks. Who can you prioritize the information? Get the important stuff through and recognize that data as mission critical? Packeteer showed up as best of breed.

Q: What is Packeteer's competition?

A: Names like Virtual Networks, Check Point Software Technologies, and some of the big companies: This is a space Cisco is very focused on.

Q: The fund has grown swiftly, from near nothing last year to more than \$100 million. When will you close it?

A: We have a long way to go before we have to worry about that. But I think a tech fund in the \$700 million space is a good fund. That gives you the respect and credibility of the investment community. It certainly gives you the attention of most companies out there. Yet there's still enough liquidity in the marketplace for you to work a fund like that.

Q: What's the holding you're most worried about?

A: Juniper Networks. It's up a lot. Here's the predicament: I have a \$2 million gain. Now, I have a role in being tax-efficient, and I need a really good fundamental reason for me to be so off or just trading away my gains.... I don't have that reason. I also think the estimates are outrageously low. The [earnings] consensus right now is \$150 million for 2000. [Juniper] could easily do \$300 million.

High-Tech Standout

Orbitex Info-Tech & Communications Fund (OITAX)

ASSETS \$103 million

YEAR-TO-DATE TOTAL RETURN 61%*

TOTAL RETURN SINCE INCEPTION 55%**

SALES CHARGE 5.75%

KEY HOLDINGS Oracle, Microsoft, Juniper Networks

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*Through Sept. 15, 1999, adjusted for loads

** Annualized for October, 1997–Sept. 15, 1999, adjusted for loads DATA: ORBITEX MANAGEMENT

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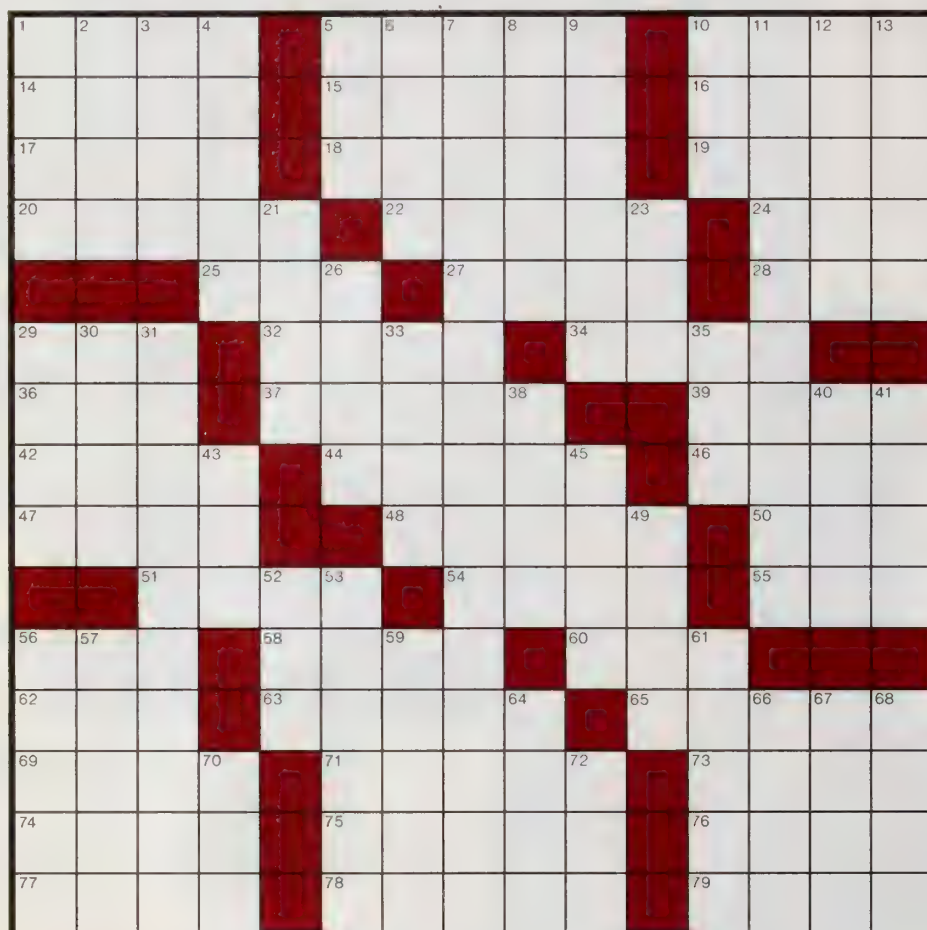
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Mixing Business with Pleasure by Lincoln

Puzzle #18



ACROSS

1. IRS employees: Abbr.
5. "Goodbye, Mr. Chips" star
10. Savings-bank insurer: Abbr.
14. Major copper exporter
15. Fictional Arden
16. __ Bell (TRICON division)
17. Unique individual
18. Income, in France
19. Computer-screen primary color
20. Employees, collectively
22. CIO partner: Abbr.
24. Word ignored by alphabetizers
25. Be in session
27. Working without __ (acting riskily)

28. Health-care professionals: Abbr.
29. Joseph Kennedy was its first head: Abbr.
32. Iranian statesman Bani-__
34. Statistician's stock-in-trade
36. Box with a newspaper's motto
37. Rise, as costs
39. Think-tank output
42. "Look what fell out of the family __" (see page at right)
44. HMO member's concern
46. Pen pals, perhaps
47. Risky business, for short
48. Accumulated, as debts
50. Statistician's stock-in-trade: Abbr.

51. Aggressive marketing campaign
54. Accounting period
55. Canada's sales tax: Abbr.
56. Federal budget administrator: Abbr.
58. __ down (demolish)
60. Japan's largest PC seller
62. Cultural activity funding source: Abbr.
63. Columbus' port
65. NASDAQ unit
69. Hankering
71. Turnpike charges
73. Opera solo
74. Soap shape
75. In the dark
76. Sermon subjects

77. Otherwise
78. Annoying ones
79. Competitive advantage

DOWN

1. Naval noncoms: Abbr.
2. __-up demand
3. Field of expertise
4. Browses the Internet
5. " __ Stern" (German publication)
6. Top-rated
7. Employment report p
8. Take, as advice
9. There's a lot of interest in its work
10. Antitrust enforcer: A
11. High-risk way to play the market
12. Former TWA owner
13. Highway markers
21. Royal treasury
23. Like blimps: Abbr.
26. Soft mineral
29. Complete collection
30. Legendary lawman
31. Secret rehiring of laid-off workers
33. Haute couture comp familiarly
35. Practical fact
38. Ruination
40. Teamwork inhibitors
41. Secretary, for example: A
43. Common Market mo
45. Chinese coin
49. Board member, usually: A
52. Car-care brand owned by Clorox
53. Intensify, as competit
56. In abeyance
57. Chrome or copper
59. Solo
61. #2 U.S. bank
64. Thin cut
66. Extremely dry
67. Phone call
68. Simplify
70. Haw preceder
72. State and La Salle, in Chicago: Abbr.

For answers to this puzzle:

Turn to page 249 in this week's issue of Business Week or visit Mixing Business with Pleasure by Lincoln on www.businessweek.com (URL: www.businessweek.com/adsection/puzzlesbylincoln/index.htm)

Puzzle created by: Stanley Newman.

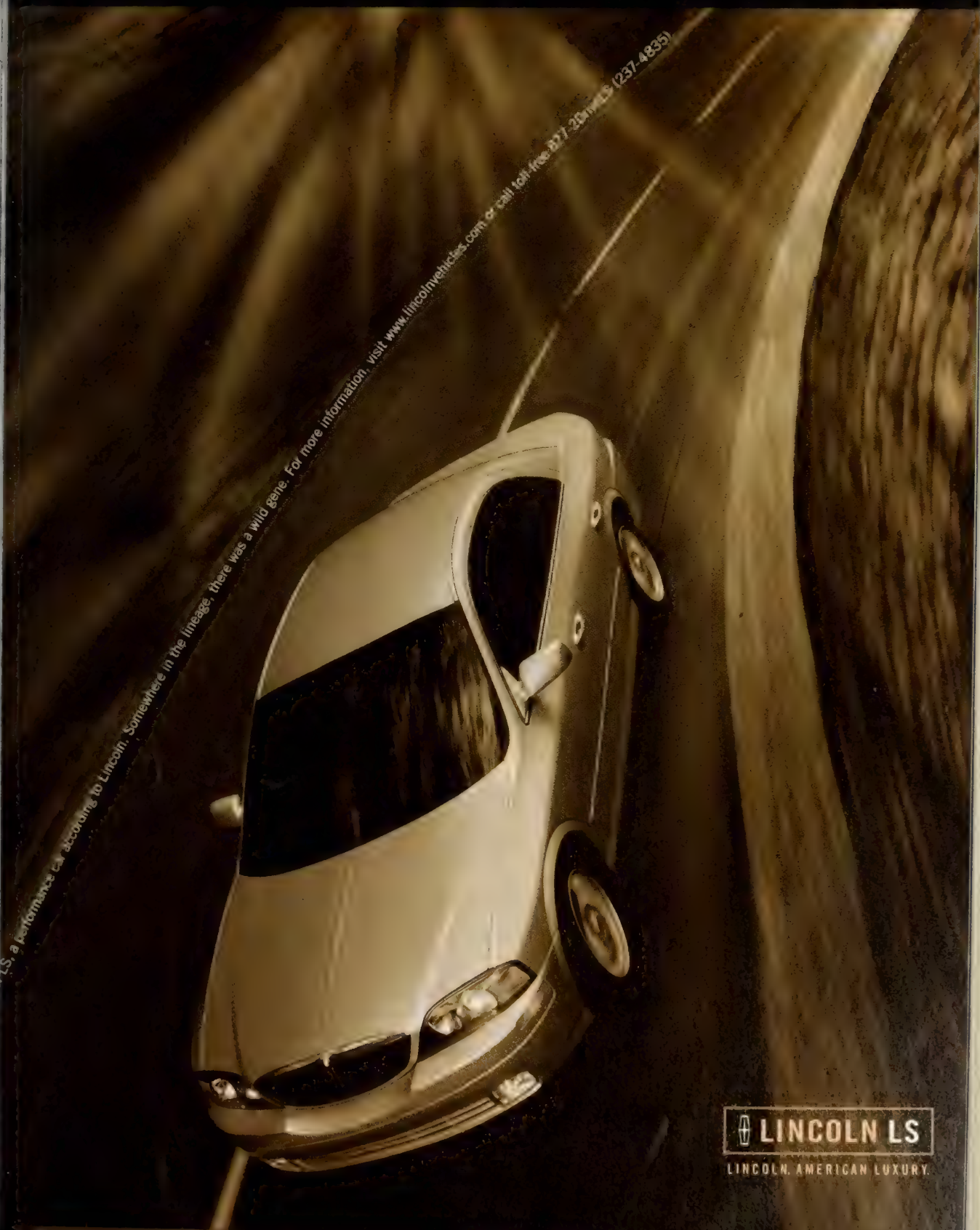


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BY ROBERT BARKER

John Bogle Jr., son of Vanguard's founder, is striking out with Bogle Investment Management. His first offering: a small-cap growth fund

Talk about great expectations. Since John Bogle Jr. suddenly left his post last winter as quant-in-chief at the Numeric Investors mutual-fund group, fundland's cognoscenti have been chat-chat-chattering away on Internet message boards about what Bogle would do next. It got so bad that one Morningstar.com poster asked, "Can anybody please coherently explain the fascination, nay, fetish, with the whereabouts and future plans of one Bogle Jr.?"

Well, there's obvious curiosity about the son of an industry legend, in this case Vanguard Group founder John Bogle, who is succeeding in Dad's world. But the real reason is even simpler: Bogle Jr. knows how to make money—especially in small stocks, where he crushed rivals with N/I Numeric Investors Micro Cap Fund (table). Now, such fund aficionados as Laguna Niguel, Calif., attorney Steve Dunn are itching to dump shares in the N/I fund and send the dough to Bogle. He even phoned Bogle at his Wellesley, Mass., home. "When is the new fund starting?" he wanted to know. "Who do I call?"

The answers are October, and 877-BOGLE-IM. I learned that and a lot more the other day after visiting suite 206 at 57 River St. in Wellesley, where Bogle Investment Management has just set up shop. There's not much to see: 2,200 square-feet of blue carpet, a black Dell 2300 PowerEdge server still sitting on the floor, three partners, and one anxious Bogle. "Can I give you the tour?" he asked me. "It'll take all of 15 seconds."

A FALLING OUT. Three hours later, I had a good sense of where Bogle has been, and where he's headed this fall as he turns 40. At Numeric since 1990, Bogle fell out in February with its president, Langdon Wheeler, in a management clash. Bogle was left reeling. He didn't set a new course until April, when he met Keith Hartt, a PhD statistician and trader with six years in Fidelity Investments' quant group. What ensued was one of those Vulcan mind-melds out of *Star Trek*: Hartt soon quit Fidelity.

The two spent all summer in Bogle's housing models they hope will slay the market. "We need performance right out of the box," Bogle says. "We need to make sure it's dead right."

Along with a private hedge fund, they plan to launch Bogle Jr.'s fund by Oct. 1 to begin running Bogle Small Growth Fund, with a \$10,000 minimum investment. Bogle also is in talks to run some other funds, including a mid-cap growth fund, one of two other fund companies—neither Vanguard, he notes. Eventually, he hopes to offer a series of "tax-efficient" funds that minimize investors' tax bills. His goals: to run \$100 million within one year, \$250 million in the next.

Should some of that be yours? Not if your money is in a taxable account. Bogle's fund holding stocks on average eight years or less, so most gains, if any, would be taxable at high rates. But if you want part of your money in a tax-deferred savings instrument or other tax-deferred savings in growth stocks, the fund is worth a look.

From a pool of 1,100 domestic stocks,

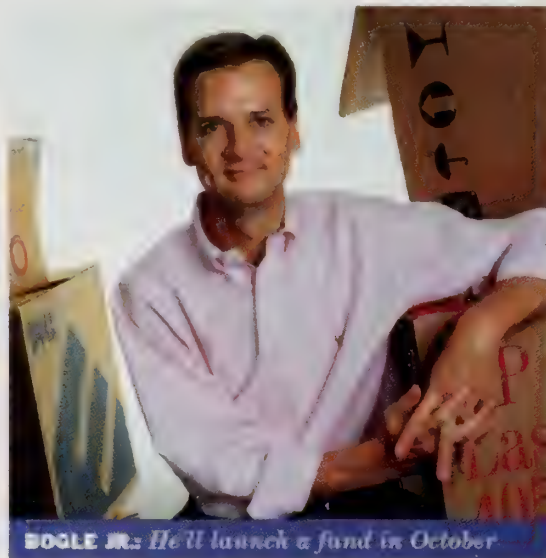
market values of \$1 billion or less, the fund aims to put 100 stocks in the fund at any one time. His new computer model is based on ranking them on dozens of quantitative criteria, including such "momentum" measures as a company's earnings, it reports surprise Street analysts.

That's, common these days. So Bogle hopes to get an edge by looking at trading of corporate insiders and changing dividend policy that management's

look on earnings. He also is applying statistical "quality," or reliability, of a company's past and its financial strength, criteria that have been popular with pencil-and-paper investors, not quants. Absent those checks, most computer-driven portfolios are vulnerable to profit blowouts such as Sunbeam's or Cendant's. By contrast, Bogle is happy to override his computer's conclusions at any moment.

Will all this work? It's hardly riskless. Even Bogle picks winners, small growth stocks lagged since 1994 and figure to plunge in a market break. High interest rates or recessions could be killers, too. Yet Bogle's new fund has two big things going for it. First, a plan to start small and close at \$150 million, which offers a huge leg up. More important, Bogle Jr. knows he's now all on his own: Those great expectations are his alone to fulfill, or not.

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BOGLE JR.: He'll launch a fund in October

Small Stocks, Big Returns

How Bogle's last small-stock growth fund beat the competition

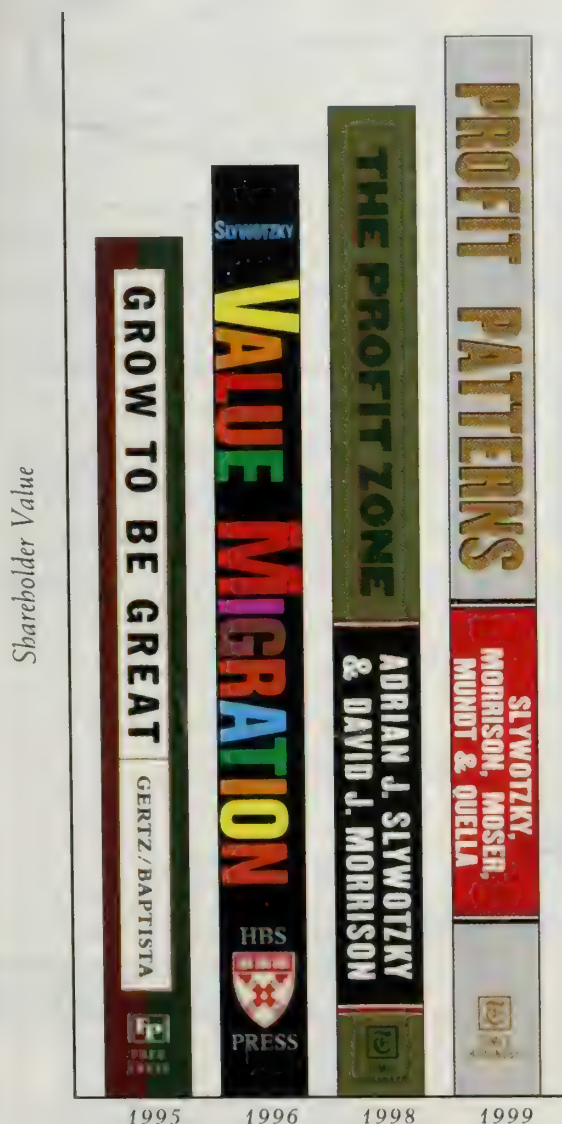
FUND	TOTAL RETURN
N/I NUMERIC INVESTORS MICRO CAP	25.1%
AVERAGE SMALL GROWTH STOCK FUND	7.5
RUSSELL 2000 GROWTH INDEX	4.0

*ANNUALIZED, FROM JUNE 1996 INCEPTION THROUGH JANUARY, 1999
DATA: MORNINGSTAR

QUESTIONS? COMMENTS? E-mail barkerportfolio@businessweek.com or fax (407) 728-1711

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3. In the "Add Location" window, type a name for the location (for example, TCP/IP location).
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CIDCO'S SECOND WIND?



NE G. MARCIAL

A stock you might wish you had discovered earlier—in March, to be precise, when it was trading at around 4—is CIDCO (CIDCO). This developer and maker of devices for caller-ID, voice-mail navigation, and Internet access has since soared above 13. Is the game over, then, for this fast-rising stock? Some investors bailed out after the upswing. But Brion Tanous, a senior analyst at First Security Van Kasper, thinks the fun has just begun. His original target for the stock of 20, made when CIDCO was at 8, may be conservative at this point, he says. Surging demand for its products and a hot new Internet device, he adds, could boost the stock to 34 in a year.

"CIDCO's recently introduced Internet appliance, MailStation, could generate major sales—as well as a recurring revenue stream," says Tanous. CIDCO has rolled out its MailStation to phone companies and retail channels. The MailStation is a portable device the size of a computer keyboard that enables a user, without a PC, to communicate over the Web for info services such as stock market quotes, weather reports, and sports headlines, and to send and receive e-mail. It uses a small LCD screen for writing and reading e-mail. One company that makes a rival Internet appliance is privately held Landel Telecom, whose product is called Mailbug.

CIDCO's customer base includes the Baby Bells as well as Sprint, Sweden's Telia, and Mexico's Telmex. Tanous thinks CIDCO could ship 50,000 MailStations to telcos in the third quarter and about 4,000 units to direct retailers. MailStation alone, says Tanous, could add 7¢ to 14¢ a share to earnings in the third quarter. For 1999, Tanous expects CIDCO to earn 49¢ a share on total sales of \$184 million, and in 2000, earnings of \$1.05 on \$232 million. These estimates may be low, he adds, if MailStation tops expectations.

WITH DIAL, CLOROX COULD CLEAN UP

Shares of Dial (DL) are scraping bottom—at 27, not far from this year's low of 26. It was flying high at 38 in late June, when rumors swirled that the soap-and-detergent maker was a possible takeover target. As often happens, the hot money jumped ship when the rumors got cold. And fears about competition from Wal-Mart Stores' private-label detergent added to the pressure on the stock. But with the raging consolidation in

the household-product industry, some pros believe that those early takeover rumors were founded on more than just froth.

One money manager at a major Wall Street investment bank, who has been snapping up shares, insists that Clorox, a diversified producer of household-cleaning and grocery products, is "interested in acquiring Dial to add more brand names to its line." Clorox wants to expand, he says, its stable of brands, all of which are either No. 1 or No. 2 in their product categories. Dial's Purex detergents, Dial bar soap, Breck hair products, and Armour canned meats are among the products that Clorox covets, according to this pro. Clorox is "great global marketer that needs more brands to manage," he adds. He thinks Dial is worth 30 to 40 in a buyout.

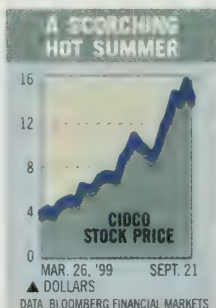
Analyst Andrew Shore of PaineWebber says that at its current price, Dial is too cheap to ignore: "It is now vulnerable to a takeover." But he doesn't see it happening over the next six to nine months. Dial and Clorox both declined comment.

THIS CABLE OUTFIT IS GETTING TUNED IN

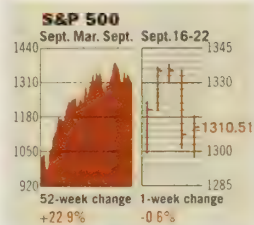
No, Blonder Tongue Laboratories (BDR) isn't in the hair-coloring or meat-processing business. The company, named after two founders, makes electronic equipment for the franchised and private cable-TV industries. It recently attracted attention when it announced a \$16 million pact to supply Cablevision Systems with its HomeControl "interdiction" units for 100,000 cable subscribers in New York. Interdiction products allow cable operators to control service at the cable office rather than the subscriber's location—so that operators don't have to dispatch costly technicians to remedy trouble.

Blonder's stock, trading at 5 in early August, moved up to nearly 9 on news of the Cablevision deal. It has since dropped to 7%. The betting is that Blonder will soon announce another agreement larger than Cablevision. One big investor says Blonder has been in talks for such agreements with several large operators, including Time Warner and TeleCommunications. He figures that sales from interdiction products alone could hit \$40 million in 2000, with overall sales rising to \$100 million, up nicely from 1999's estimated \$65 million. This investor, who has been accumulating shares, figures that 2000 earnings will jump to \$1.20 a share, up from 1999's estimated 40¢.

Blonder, says this investor, has yet another hidden attraction: Management, which controls 65% of the stock, disclosed in its proxy statement in May that it received two acquisition offers. The board dismissed the offers as inadequate.



STOCKS



COMMENTARY

It's too soon to fret about third-quarter earnings, so the jittery market focused on the widening trade deficit and the dollar's fall against the yen. The Dow Jones industrials finished the week at 10,524.1, a three-month low. Even a Fed survey that showed brisk economic growth with no inflation couldn't jump-start a rally. Only technology stocks were able to buck the downtrend.

Data: Bloomberg Financial Markets

U.S. MARKETS

	Sept. 22	Week	Year
Dow Jones Industrials	10,524.1	-2.6	33.3
Nasdaq Composite	2858.2	1.6	68.3
Nasdaq 100	2513.9	2.1	88.1
S&P MidCap 400	394.0	-1.8	27.1
S&P SmallCap 600	176.0	-2.2	14.0
S&P SuperComposite 1500	275.4	-0.7	26.9

SECTORS

	Sept. 22	Week	Year
S&P/BARRA Growth	765.0	0.8	34.8
S&P/BARRA Value	569.1	-2.1	18.9
S&P Basic Materials	124.5	-2.9	14.0
S&P Capital Goods	1009.7	0.1	37.6
S&P Energy	833.3	-3.3	19.2
S&P Financials	123.9	-1.5	11.1
S&P REIT	77.2	-1.9	-16.3
S&P Transportation	600.8	-5.4	-3.9
S&P Utilities	245.8	-3.0	-1.3
GSTI Internet	436.5	3.6	197.0
Morgan Stanley Cyclical	550.7	-3.7	34.4
PSE Technology	651.0	1.1	101.6

BEST-PERFORMING GROUPS

	Last month %	Last 12 months %
Defense Electronics	11.7	Instrumentation 131.3
Computer Software	10.6	Semiconductors 130.4
Instrumentation	9.8	Communications Equip. 107.6
Communications Equip.	9.5	Computer Systems 82.4
Semiconductors	7.9	Invest. Banking/Brkrge. 72.3

GLOBAL MARKETS

	Sept. 22	Week
S&P Euro Plus	1337.7	-1.6
London (FT-SE 100)	5913.9	-2.5
Frankfurt (DAX)	5238.8	-2.8
Tokyo (NIKKEI 225)	17,325.8	-2.5
Hong Kong (Hang Seng)	13,187.6	-1.8
Toronto (TSE 300)	6886.1	-2.5
Mexico City (IPC)	4991.8	0.4

FUNDAMENTALS

	Sept. 21	Week ago
S&P 500 Dividend Yield	1.29 %	1.26 %
S&P 500 P/E Ratio (Trailing 12 mos.)	31.0	31.5
S&P 500 P/E Ratio (Next 12 mos.)*	22.9	23.4
First Call Earnings Revision*	-1.07 %	5.80 %

*First Call Corp.

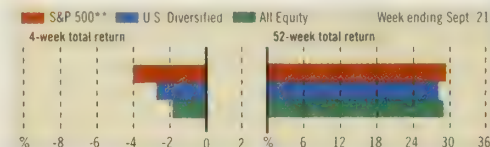
TECHNICAL INDICATORS

	Sept. 21	Week ago
S&P 500 200-day average	1301.2	1297.4
Stocks above 200-day average	34.0 %	37.0 %
Options: Put/call ratio	0.63	0.54
Insiders: Vickers Sell/buy ratio	1.13	1.11

WORST-PERFORMING GROUPS

	Last month %	Last 12 months %
Furnishings & Appliances	-23.8	Pollution Control
Housewares	-23.4	Manufactured Housing
Apparel Manufacturing	-21.7	Food Wholesalers
Metal & Glass Containers	-17.1	Tobacco
Specialty Appar. Retailers	-15.7	Life Insurance

MUTUAL FUNDS



Data: Morningstar, Inc.

**Vanguard 500 Index fund

EQUITY FUND CATEGORIES

Leaders	Four-week total return	%	Laggards	Four-week total return	%
Japan	9.6	Financial	-9.1		
Diversified Pacific/Asia	5.5	Large-cap Value	-5.8		
Technology	4.3	Mid-cap Value	-5.8		
Precious Metals	4.2	Health	-4.7		
Latin America	1.7	Natural Resources	-4.4		
Leaders	52-week total return	%	Laggards	52-week total return	%
Technology	113.2	Real Estate	-0.6		
Japan	108.7	Precious Metals	4.8		
Diversified Pacific/Asia	87.5	Financial	8.5		
Pacific/Asia ex-Japan	85.7	Small-cap Value	11.2		
Communications	69.3	Domestic Hybrid	12.8		

INTEREST RATES

KEY RATES	Sept. 22	Week ago	Year ago
MONEY MARKET FUNDS	4.86 %	4.83 %	5.06 %
90-DAY TREASURY BILLS	4.80	4.75	4.68
1-YEAR TREASURY BILLS	5.23	5.25	4.59
10-YEAR TREASURY NOTES	5.91	5.94	4.67
30-YEAR TREASURY BONDS	6.09	6.11	5.17
30-YEAR FIXED MORTGAGE†	7.83	7.85	6.78

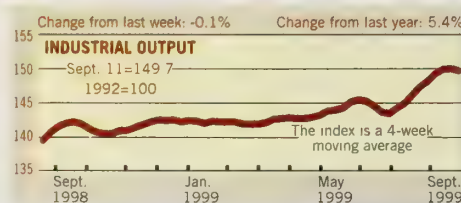
BLOOMBERG MUNI YIELD EQUIVALENT

Taxable equivalent yields on AAA-rated, tax-exempt municipal bonds, assuming a 31% federal tax rate.

	10-yr. bond	30-yr. bond
GENERAL OBLIGATIONS	4.92 %	5.07 %
TAXABLE EQUIVALENT	7.13	8.13
INSURED REVENUE BONDS	5.07	5.17
TAXABLE EQUIVALENT	7.35	8.13

†BancQuote, Inc.

BW PRODUCTION INDEX



Information on each of the index components is at www.businessweek.com.
BW production index Copyright 1999 by The McGraw-Hill Companies

The production index and the unaveraged both slid in the week ended Sept. 11. Calculation of the four-week moving average of the index fell 0.3%, to 149.2, from 149.5 the previous week. Auto and truck production fell 3.1%, and rail-freight production fell 0.7%, with 6.1% fewer cars and trucks produced this week than last week. Output of steel, electricity, oil, and coal increased.

THE WEEK AHEAD

CONSUMER CONFIDENCE Tuesday, Sept. 28, 10 a.m. EDT ▶ The Conference Board's index of consumer confidence was likely unchanged in September from its August reading of 135.8. That's the median forecast of economists surveyed by Standard & Poor's MMS, a unit of The McGraw-Hill Companies. Confidence is historically high, thanks to strong labor markets and a rising stock market.

DURABLE GOODS ORDERS Wednesday, Sept. 29, 8:30 a.m. EDT ▶ New orders taken by durable-goods manufacturers probably fell 0.5% in August, after a large 3.6% advance in July.

NEW HOME SALES Thursday, Sept. 30, 10 a.m. EDT ▶ New homes likely sold at an annual rate of 960,000 in August, down from a 980,000 pace in July. Despite the expected fall, home sales are on track to have their best year ever.

PERSONAL INCOME Friday, Oct. 1, 8:30 a.m. EDT ▶ The S&P MMS median forecasts expect that personal income increased by 0.4% in August and consumer spending advanced 0.6%. The strong spending gain is suggested by the 1.2% jump in retail sales for the month. In July, personal income grew a modest 0.2%, while spending was up by 0.4%.

NAPM SURVEY Friday, Oct. 1, 10 a.m. EDT ▶ The National Association of Purchasing Management's business index probably hit 54.5% in September, a bit better than the 54.2% reading in August.

CONSTRUCTION SPENDING Friday, Oct. 1, 10 a.m. EDT ▶ Building outlays likely edged up 0.3% in August, following a 0.5% drop in July.

BusinessWeek ONLINE

For more investment data and the components of the production index, visit www.businessweek.com.

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gives the starting page for a story or with a significant reference to a company. Subsidiaries are indexed under their own names. Companies listed only in tables are not included.

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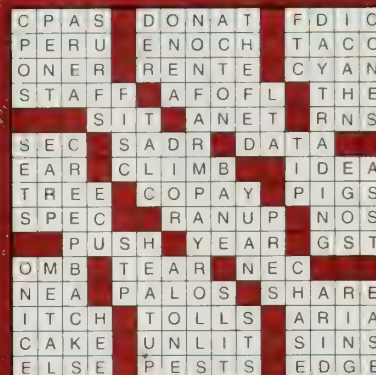
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Special Advertising Feature

Mixing Business with Pleasure by Lincoln



Answers from puzzle #18
in Business Week.



LINCOLN

GROWING PAINS OF THE INTERNET AGE

It is the most dazzling and dizzying time of our lives. For most people, the Net didn't even exist five years ago, but here it is—generating faster economic growth, lower inflation, amazing job opportunities, and more wealth than ever anticipated. It's also proving to be wildly exciting—a cool, untamed creature that is spawning the greatest digital gizmos, forging business models that shouldn't make sense, flipping the most basic economic theories on their heads, collapsing time, redefining work, and tying together just about everybody on the globe inside a single cybermarket that's open all night. Whew!

It may seem churlish to focus on problems when we're all having so much fun. But even Internet bliss will fade unless some hard decisions are made. Here are our major worries.

One danger is that the Internet Age is creating a prosperity gap that could split the body politic. Peel back the overall statistics for the dynamic U.S. and you will find a tale of two economies: slow growth in investment, productivity, profits and pay for Old Economy industries, fat salaries and oodles of options for Net companies. The divergence is startling. The single most important challenge ahead is to close that gap. But what policies should be used? The New Economy folks, for example, are lobbying Washington to increase the quota for H-1B visas mostly for foreign software writers. More foreign high tech workers, they say, will help their Internet Age companies. But labor unions oppose the visas and want more government money spent on schools to train people in Internet skills. In the most recent round of visa negotiations in Congress, Old Economy forces defeated the New.

The policy split spills over into taxes. Unions and most state governors want to tax sales on the Internet to help fund schools and link libraries to the Net. But Net people, supported so far by many members of Congress, oppose net taxation. The great success of e-commerce proves this position, they say. Who's right? We must decide—and soon.

Another problem facing the Internet Age is a real doozy. Technology-driven growth cycles often lead to technology-driven recessions. The next downturn in the economy—and current prosperity shouldn't blind us to the inevitable—could be unlike anything seen in recent decades. Histories of earlier high-tech economic booms show that at some point, too much capacity gets built, triggering a recession that is extremely severe. In the next recession, the economy could fall much further and longer than anyone is now expecting.

BLINDERS

But what tools exist to bring the U.S. out of a Net recession? Will policies that ease money and boost government spending work? Will some form of high-tech government spending program be needed if things get really bad, and what form should that take? One thing is certain: The transition from one kind of economy to another can be treacherous, and the burden of overcapacity can be overwhelming. Who in Washington is worrying about the tech cycle?

Another concern: frontier justice. As on all frontiers and order is a sometime thing on the Net—mostly old rules don't appear to fit but also because frontier folk want outsiders messing with them. The amazing expansion of the Net is testimony to this openness. The deconstruction of business, the irrelevance of middlemen, the invention of new forms of auction pricing, the partnering of customers and sellers, and a host of other changes show that, so far, neglect has been effective government policy for the Internet.

PRIVACY ABUSES

But frontiers require self-policing, and e-commerce has failed to corral themselves. The Net is the grand marketplace because it places the customer at the epicenter of transactions. To function efficiently, it must therefore do two things: guarantee customer privacy and ensure the reliability of the information customers use to make decisions. On these counts, the Net has done both jobs poorly.

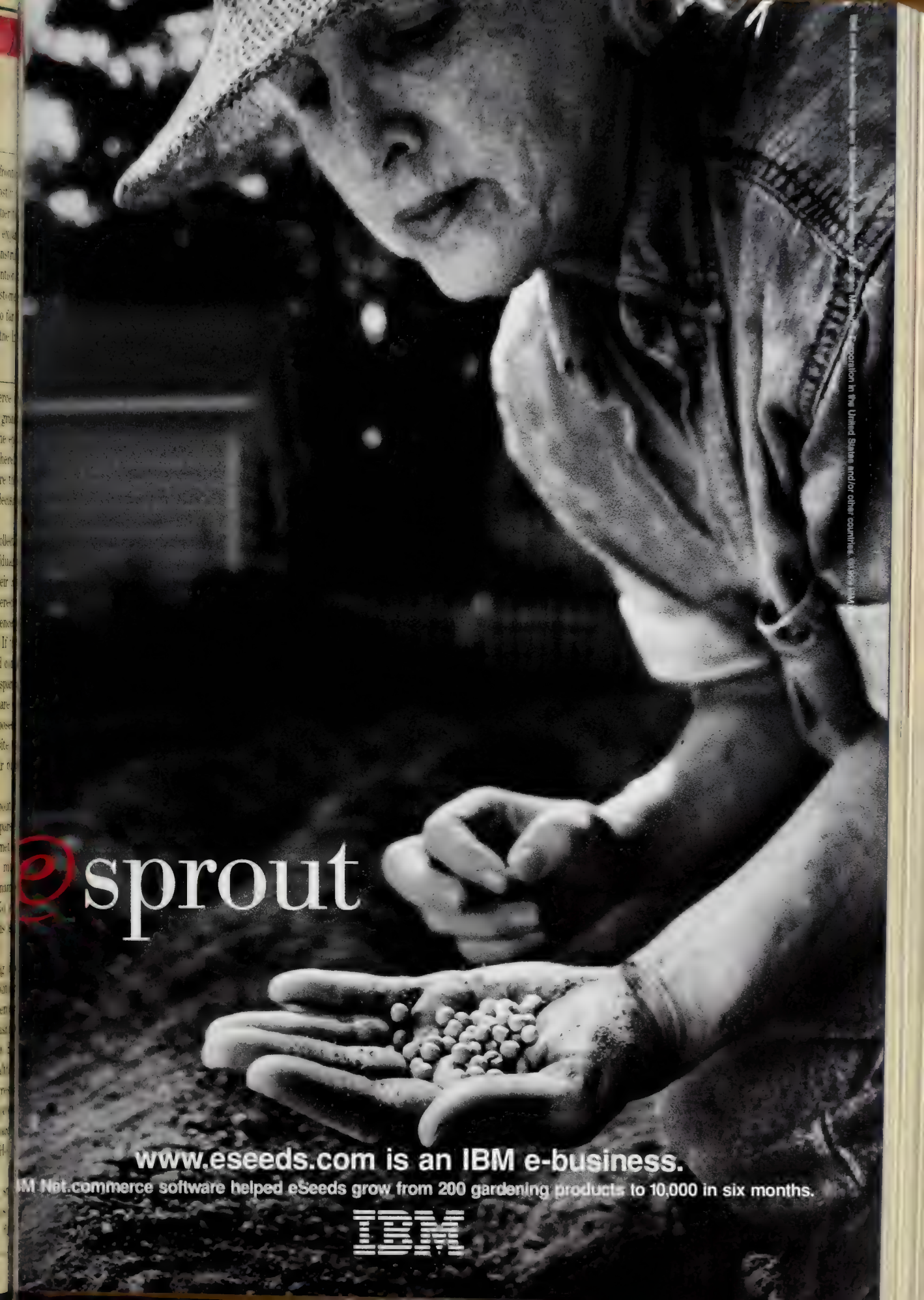
Data from children using Web sites have been collected and sold without parents' knowledge. Data on individual users have been packaged and sold to third parties without their consent. Privacy policies have been promised and not delivered, or delivered and not administered. And major differences between Europe on privacy policies have gone unresolved. If the Net is to flourish, its users must feel comfortable—and control their data.

Customers require objective, balanced, and transparent information to make their decisions. Many Web sites are full of ways that create conflicts of interest—when a supposed objective product review leads to an e-commerce site selling that product. Others routinely steer people to their business partners' sites.

At the least, the consumer should know all about the practices and relationships. Full disclosure and transparency in business ties must be the *sine qua non* of the Internet to garner customer respect and dollars. At the moment, they're not. Yet consumers' obsession with brand names reflects a desire for credibility and legitimacy online. No one, especially GenY Web surfers, wants to be "taken." This is a major worry for e-commerce on the Net.

The shape of the Internet Age is only now coming into focus. Policy debates are occurring just as a major political alignment is taking shape. A new political nexus is emerging in America, tying together Silicon Valley and Washington as power shifts from the Old Economy to the New Economy—and the Old Economy fights back. New wealth from the Netzone is flowing into Presidential and congressional campaign coffers for 2000. Unlike Old Economy economic interests, such as labor unions, small business, or tobacco, the Net is not tied to either Democrats or Republicans. How the transition will affect the Internet Age is anybody's guess.

Moving from one economic era to another is never smooth. The Internet's dazzle hides some serious problems. How quickly and capably we face them will determine its future.



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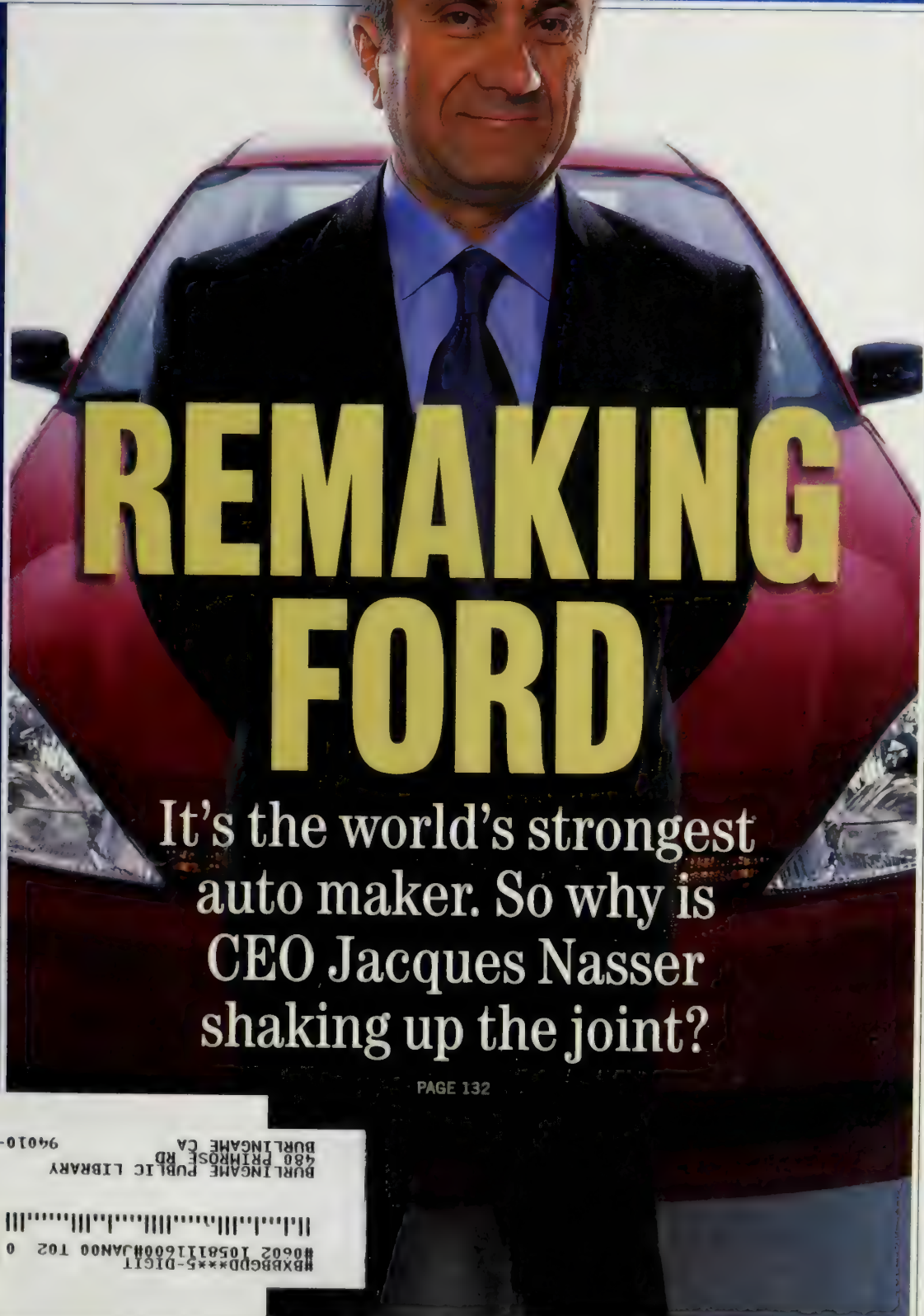


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REMAKING FORD

It's the world's strongest auto maker. So why is CEO Jacques Nasser shaking up the joint?

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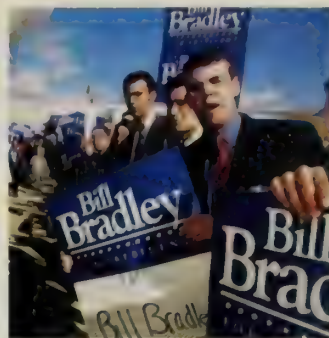
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Up Front

EDITED BY ROBERT McNATT

BIG TOBACCO

WINNING HEARTS AND LUNGS

IT MAY BE EMBROILED IN lawsuits and controversy, but somehow tobacco giant Brown & Williamson still thinks that love rules the world—or at least the smokers in it.

B&W says that people calling one of its customer-service lines were getting testy with operators after navigating the standard “press zero if you want to speak to an operator” option menu. So, after warning those who are underage and nonsmokers to hang up, a message from Chairman Nicholas Brookes’ company states: “We, the Brown & Williamson Tobacco Corp., are in love—with you.”



Music swells in the background. Then: “We’re a giant corporation, and you make us feel like a little kitten. Thank you, lover.”

“By the way, the other tobacco companies hate you and think you are ugly. They told us so.”

So what gives? A B&W spokesman says, “We think we are a fun company. We are human beings with families and a sense of humor.”

Not everyone is laughing. Says Patrick Reynolds, grandson of to-

bacco magnate R.J. Reynolds and an antismoking activist, “If you don’t think people in tobacco companies are a little warped, call this number.”

Hear it for yourself: 1-800-578-7453. *Roy Furchgott*

THE LIST: HEY, BIG TECH SPENDER

Financial institutions were the biggest e-commerce spenders last year, but ranked only 11th in income growth out of 21 industries surveyed. Income at telecom companies actually fell. In contrast, the food and beverage industry devoted a mere 5.4% of its corporate expense to e-commerce and enjoyed strong income growth. Lesson: E-commerce isn’t best for everyone—yet.

INDUSTRY CATEGORY	% OF CORPORATE EXPENSE DEVOTED TO E-COMMERCE	RANK*	1998 INCOME GROWTH OVER 1997	RANK*
FINANCIAL	25.6%	1	29.6%	11
TELECOMMUNICATIONS	16.9	2	-22.3	21
BANKING	15.6	3	25.2	12
ELECTRONICS	10.1	4	10.4	19
INFORMATION TECH.	9.7	5	48.4	3
MEDIA	9.7	6	44.9	4
PHARMACEUTICALS	9.6	7	11.2	18
INSURANCE	9.5	8	34.0	8
PROF. SERVICES	8.9	9	35.0	7
UTILITIES	8.7	10	20.8	16

* Out of 21 industries (a total of 832 companies) surveyed DATA: META GROUP/RUBIN SYSTEMS

TALK SHOW “The content of this exhibition may cause shock, vomiting, confusion, panic, euphoria, and anxiety.”

—Brooklyn Museum of Art’s warning about ad man Charles Saatchi’s collection, which includes a dung-encrusted Virgin Mary

PRODUCT PEEK

HEY, LITTLE SURFER

THE NEXT TIME YOU go online, instead of sitting at a desk you could be browsing a mall for bargains or checking the weather forecast while you wait at the airport for a flight. That’s the promise of 3Com’s Palm VII: the Internet in your hand.

The national rollout of the gizmo on Oct. 4 marks the coming of age of wireless Net access, says the company. But don’t expect unlimited Web surfing quite yet. Neither wireless handheld computers nor Internet-ready cell phones can handle that. Users, however, can glean

such snippets from the ocean of Internet data: stock quotes, sports scores, headlines, airfares, and some tail shopping.

Despite criticism that Palm V was too costly, it’s out in a New York marketing test this spring. And it has since cut its base price \$100 to \$499, and Net access charges one-third.

Experts believe that at least 20 million Americans will be heavy users of wireless data by 2004. The Palm interconnectivity puts the Palm line ahead of its nearest rival, Handspring’s Visor, which has an online capability but no Web access. The Palm VII sells for the cost of a top-of-the-line Visor. *Janet Rae-Du*



PALM VII: Handy

THE RAT RACE

PICK UP SOME EGGS AT THE OFFICE, DEAR

IT’S NOT UNUSUAL FOR A tired employee to stop and pick up some takeout for dinner. But how about some ripe tomatoes or fresh corn on the cob with that briefcase full of work? Some companies are now offering workers the option of picking up milk, bread, fruit, and veggies at the office.

Employees love the convenience of the idea, says retailer J.C. Penney, which recently began selling fresh produce to employees at its Plano (Tex.) headquarters. Workers call in their orders from their desks during the day, then stop by the cafeteria in the evening to pick up their food. With produce selling up to 30% cheaper than at local markets, the program has been popular, says Penney.

In Baltimore, Sodastream Services, a food-service company, says it is already running test fresh-food sales at six of its companies. And to round out the at-work shopping experience, industry experts foresee more proprietary convenience stores,



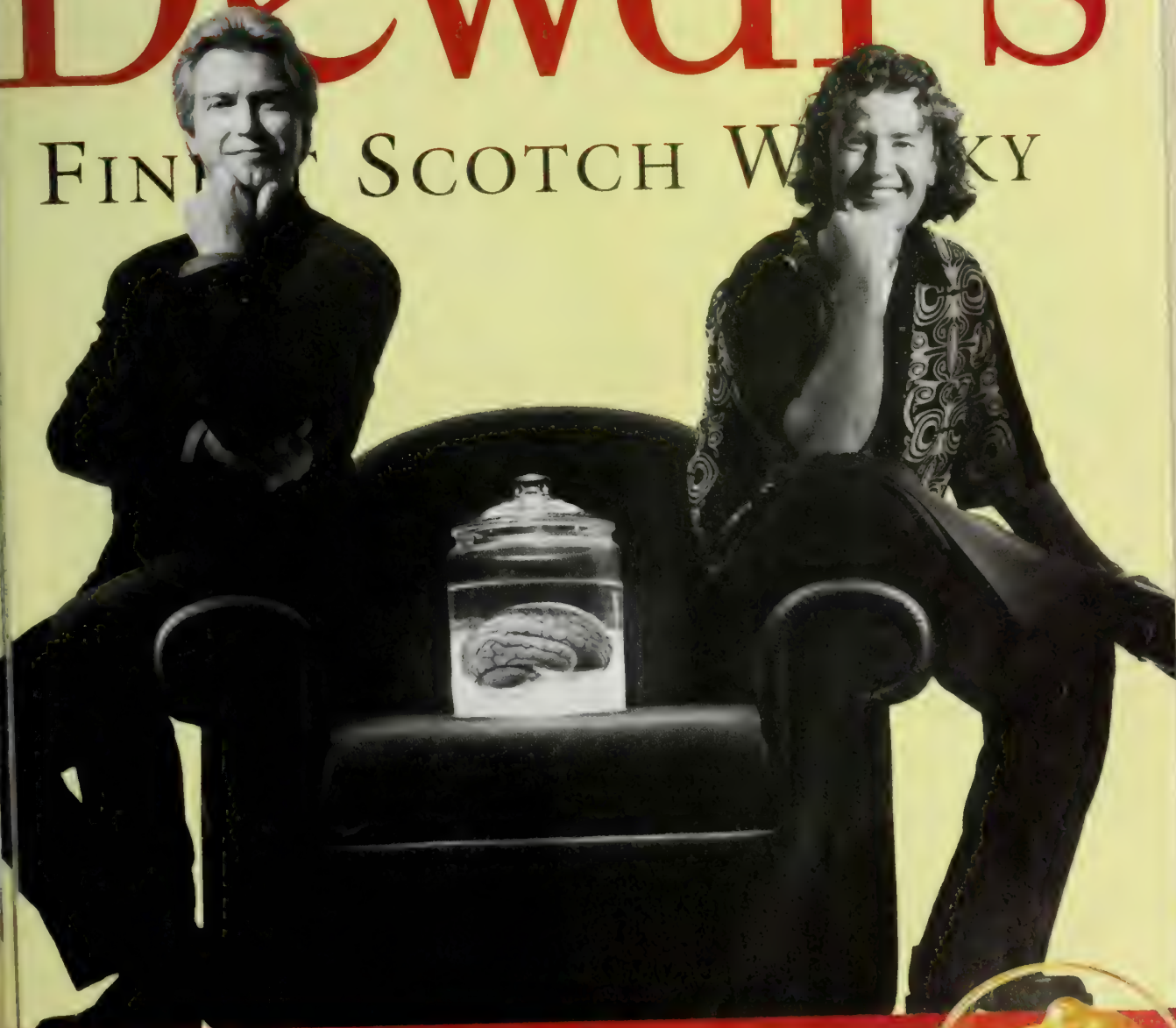
such as Owens Corning’s at its Toledo headquarters. Some companies have long had onsite day-care facilities. Now there’s the move to onsite grocery shopping. Soon, you’ll never need to leave work. *Dennis B.*

Dewar's. PROFILE

And Alexander & Richard last
year by creators of Cranium

Dewar's

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Up Front



ROAD RACES

BATTLE OF THE MUSCLE BIKES

HONDA HAS DECLARED WAR ON its rivals in the U.S. over the hot market for "sportbikes." Sales of high-performance motorcycles should surpass 76,000 this year, up 27% from 1998, predicts industry analyst Don Brown of DJB Associates.

Honda's weapon? A newly designed, more powerful CBR929RR, a response to archrival Yamaha's YZF-R1, introduced in 1998. The Yamaha model's design, speed, and handling boosted the company's share from 12.2% to 18.2% in 1999, while

CONTEST: Honda vs. Yamaha

market leader Honda's 25.2% share moved up only slightly, to 27.4%, says Brown. Honda is blunt in its intentions for Yamaha: "It's time to put them in their place again," says Ray Blank, vice-president of sales for Honda motorcycles. So Honda is holding the new model's price at last year's \$9,999. Yamaha's 2000 model remains at \$10,199. Honda also has to be concerned about new bikes from Kawasaki and Suzuki.

Can Honda hold off the surging Yamaha marque? "You can never count out Honda," says Brown. *Rob Doyle*

CLASS NOTES

WHICH B-SCHOOLS CARE THE MOST?

ALTRUISM AND SOCIAL responsibility are finding a bigger place in B-school curriculums. So says a study to be released on Oct. 7 by World Resources Institute and the Aspen Institute's Initiative for Social Innovation Through Business.

The two groups rated 313 graduate business schools on faculty research, support for courses on environmentalism and social issues, and student interest in those courses. WRI and ISIB then developed two lists of B-schools on the "cutting edge" of social responsibility. Nine make the grade for environ-

mentalism, 10 for social issues. A decade ago, few schools offered courses in either area.

The University of Michigan and the University of Pennsylvania ranked high on both counts, while Vanderbilt University and Rensselaer

ENVIRONMENTAL HOT SPOTS

Cornell
George Washington
U. of Michigan
U. of North Carolina
U. of Pennsylvania
Rensselaer Polytech
U. of Texas
Tulane
Vanderbilt

Polytechnic Institute were cited for innovative teaching of "green" issues. "You're going to see these programs ramp up in a very significant way," says Stuart Hart, who teaches a popular "sustainable-development" course at the University of North Carolina, also highly ranked by the study. Is such optimism warranted? WRI and ISIB plan to conduct a follow-up in 2001 to find out. *Mica Schneider*

DRAWN & QUARTERED



UNION DUES

A UNION TAKES OFF AT THE FAA

AS IF CROWDED SKIES, AGING technology, and an antagonistic Congress weren't enough, Federal Aviation Administration top gun Jane Garvey is



in a dogfight with her staff over a proposed merit-pay system. To dodge the plan, hundreds of FAA employees are seeking to unionize.

They fear the plan could limit salary hikes to only 15% of the workforce and penalize

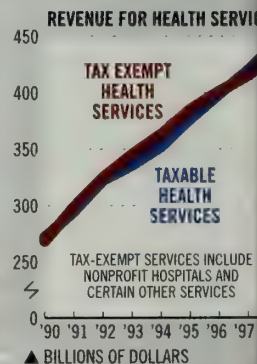
long-term employees. 100 attorneys and staff FAA's Office of Chief Counsel joined the American Federation of State, County & Municipal Employees in Washington. Three more departments are expected to follow suit in October, says AFSCME.

Garvey says pay will make salaries competitive with industry and the agency away from a civil-service system that rewards long tenure. Labor says that's fine as long as it's involved in the process. Carl Feltman, executive director of AFSCME Council 26, says: "Garvey can look at this blowing up in her face as an opportunity to involve employees." That's an opportunity Garvey may well want to pursue. *Lorraine Wo*

THE BIG PICTURE

MEDICAL COSTS STILL HURT

The rate of growth in health-care costs has slowed from at least 8% annually in the early 1990s, to less than 6% in 1998. But it still outpaces the 2.3% core rate of inflation in 1998.



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WHAT TO DO ABOUT THE BRAIN DRAIN

"Brain Drain" (Cover Story, Sept. 20) fails to mention the cause of this crisis. We have failed to develop a systematic method for developing those who will be in charge. We have relied on personal-development programs, subjective feedback mechanisms, and MBA programs taught by people who have never worked in business to develop the knowledge required to lead. We have settled for the use of abstract terminology to define the skills and abilities required and then embarked on development paths that have precipitated this current dilemma.

The math is easy: There are not enough retiring managers choosing to remain in the workforce to bridge the gap between skills required and skills needed. The consequences of this will become apparent in the years to come as our best companies become unable to seize opportunities in the future.

Michael Laddin
Shawnee, Kan.

Your article overlooked a particularly effective way to retain the knowledge and expertise of departing executives: capturing their "war stories" and lessons learned in a digital video database. Using technology originally developed to preserve the knowledge of logistics planners from the gulf war air-and-sea lift, we have conducted on-camera interviews for government agencies like the Environmental Protection Agency and Veterans Administration, as well as dozens of private-sector firms. And unlike retired executives retained to counsel only senior decision makers, this can provide every employee with instant access to an organization's best experts.

Kemi Jona
Cognitive Arts Corp.
Chicago

ARE TWO INCOMES REALLY NECESSARY?

As a nation we are suffering from our own success. If our overstuffed

economy, with more jobs, more money and more stuff, has left us with too much time and too much stress, it's time to question our priorities. A smaller economy with fewer (full-time) jobs, smaller houses, not so many cars, and less money is a logical solution to the time squeeze ("Wooing minivan moms," Working Life, Sept. 20).

When a minivan is a family's access to life outside the home, the waste of thousands of dollars and countless hours of leisure time each year. Sprawling suburbs helped create today's economy, but they are a place to live.

Greg
Brandon,

We seem to be so focused on bigger houses, sports-utility vehicles, elaborate vacations, etc., that two incomes have become a necessity. I don't consider myself a "religious righter" by any stretch of the imagination, but I have to concede that someone needs to stay at home with the kids. A recent survey of 1,000 year-old boys claims that they consider mom at home as the No. 1 status symbol—not Nintendo or an Expedition.

Perhaps the politicians should reward their efforts on getting one parent out of the workforce, maybe with a tax credit for a parent who stays at home.

Tony H
Temecula, Calif.

WORK AND FAMILY: A DIFFICULT DANCE

Thank you for "9 to 5 isn't working anymore" (Working Life, Sept. 20). However, I take issue with two assumptions. First, the Family & Medical Leave Act (FMLA) provides up to 12 weeks of leave, not six months. Second, the statement that the FMLA is easing the burden for working parents is simply untrue. Since 1993, the FMLA has helped an estimated 24 million women and men care for their loved ones without losing their jobs or health insurance.

On the other hand, author Michael

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RECTIONS & CLARIFICATIONS

Interview with French finance czar Dominique Strauss-Kahn listed in the Oct. 4 issue of contents was inadvertently dropped from the magazine but appears in this issue's International Business section.

It is right to point out the limits of unpaid leave: Too many people still cannot afford to take the unpaid leave the law provides. The bipartisan Family and Medical Leave Commission found that cost is the main reason people do not take unpaid leave. It also found that 1 out of 10 FMLA users is forced on to public assistance while on leave. As the nation ages, the need for family leave is only going to rise.

The good news is that across the country, concerned policymakers, researchers, and advocates for women, seniors, senior citizens, caregivers, people with disabilities, business, and labor are joining the Campaign for Family Leave Income, launched by the National Partnership for Women & Families in June, 1999. Promising approaches to the problem of unpaid leave include: letting people collect unemployment insurance or disability insurance while on family leave; subsidies or credits to make family leave more affordable; and state and private policies that make it easier for people to use their own sick leave when family members are ill.

Support for commonsense, cost-effective solutions is growing on all fronts. Several states, including California, Massachusetts, Vermont, and Washington, are considering extending state unemployment or disability insurance programs to cover unpaid leave. Meanwhile, a recent survey found that 84% of companies with 100 or more employees report that their family-leave programs, including paid leave, either save them money (42%) or are cost-neutral (42%). As long as working women and men can choose between their families and their jobs, we all pay the price—in higher costs, lost employee productivity, and health-care costs for children, seniors, and elders. For the sake of our families and our economy, policymakers and employers must find ways to make family leave more affordable.

Judith L. Lichtman
President
National Partnership for
Women & Families
Washington

Your article on workplace flexibility and employer-sponsored child care as a sample of what's not working to ease the burden for working parents.

This is not true. A study by the Simmons College Graduate School of Management showed that 93% of working parents believe work-site child care is an important factor when considering a job change; 42% say work-site child care was an important factor in their decision to join the company they work for.

Moreover, several of the companies you cite as successful at helping employees balance work and family responsibilities (such as IBM and Merck & Co.) offer child care as a part of their

work/family strategy and are rapidly expanding their offerings.

To be sure, flexibility is an extremely important piece of the puzzle. However, anyone who has worked at home while caring for children understands the inherent challenges of such a situation. Flexibility is not a substitute for the care and education children need. I still recall the paternity leave I took with my first daughter. I had planned to exercise every day, read books, write, and catch up with friends. To my surprise,

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It's virtually impossible to demonstrate the kind of power \$20 billion gives Williams. Wanda here will try.

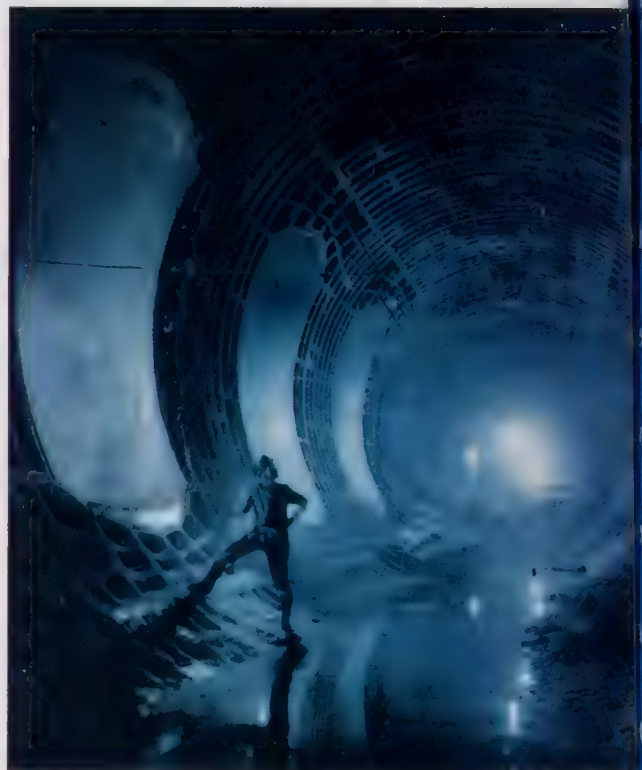
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high-capacity Internet that was, until

yesterday, just a pipe dream.



Agilent Technologies

Innovating the HP Way

Readers Report

being at home with my daughter was all-consuming and all of my plans were waylaid. I had a great experience, but work definitely took a back seat.

A successful work/family program will help employers, parents, and children be successful. Employer-sponsored child care is a critical element of a solution that can do just that.

Roger Brown
Chief Executive Officer
Bright Horizons Family Solutions
Cambridge, Mass.

Your photo portraying Joanne Dapkevich on a conference call while her toddler sits nearby doesn't represent reality. As a working mom who works from my home office quite a bit, I am constantly surprised at how many people assume my 2-year-old is home with me. It is impossible to work from home on a regular basis without child care—it's this kind of portrayal that gives us remote-working moms and dads a bad rap. It's no wonder more businesses don't give flexible working arrangements a try—they are envisioning a scenario like your photo.

Sandra Bauman
Glen Rock, N.J.

THE MAIN ECONOMIC THREAT IS A BURSTING BUBBLE

When reading "Where Net startups go to be born" (News: Analysis & Commentary, Sept. 13), I couldn't help but think these new venture capitalists were entering the game just to capitalize on the absurd level of return given to any initial public offering with .com in its name. As for the incredible returns of most Internet newcomers, what we have is a Securities & Exchange Commission-sanctioned Ponzi scheme where most (if not all) of the wealth accrues to the early, behind-the-scenes investors, and the general public ultimately may be left with little return after an exciting ride.

I recall the days when, before considering an IPO, a firm would have solid sales and at least some earnings. Now, such financial considerations are irrelevant; what is important is a "concept" for the Net. Note the phenomenon of multiple venture capitalists "investing" in a Net firm just before its IPO readiness. The venture capitalists are brought on board not for injections of cash but for their network of investors, bankers, and brokers who will help hype

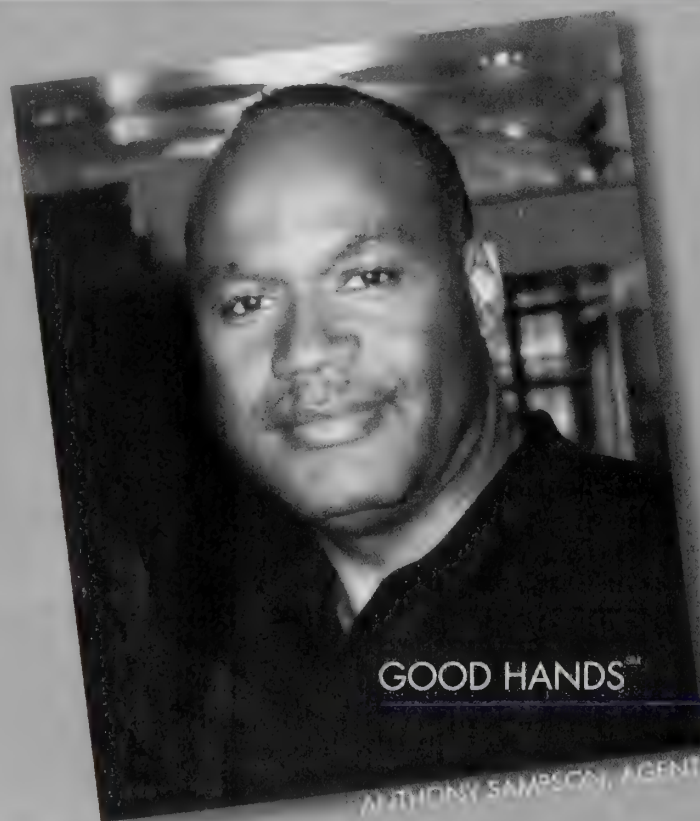
the IPO into the stratosphere. Of course, should the IPO falter, it can always be merged (at a further outlandish price) with a firm within the same industry controlled by one of the venture capitalists.

With all the bubble-like inflationary implications of Internet startups, the high stock market price-earnings ratios accorded existing firms and the effect upon other assets (have you priced residential real estate lately?), it's amazing that BUSINESS WEEK still believe that "Labor costs will be the key player" (Business Outlook, Sept. 13). What an archaic measure to carry into the new millennium. A significant bursting of the stock market bubble is a greater threat to the economy than rising labor costs.

Alfred Daniel Elser
Santa Barbara, Calif.

INNOVATION WILL HELP FILL THOSE INTERNET NICHES

We believe there will always be opportunities for Internet service providers (ISPs) that can fill a niche by offering differentiated products and



led services. While price is always or, even the threat posed by free net access will never materialize. scribes must contend with poor cal support, excessive ads, and able connections ("In a squeeze at spring," Information Technology, 20).

its part, OneMain.com is target- naller metropolitan markets and communities that are often under- d by the country's largest ISPs. areas account for 65% of the U.S. tion and are currently the fastest ng segment in terms of Internet

independent ISPs, there is a clear ative to expensive promotions or out to a larger competitor: in-

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novation. In the end, those companies that innovate and focus on the ISP model that best meets the changing demands of their customers will flourish. Those that don't will not.

Stephen E. Smith
Chairman and CEO
OneMain.com
Vienna, Va.

THE RESTRUCTURING WAVE IS STILL PAYING OFF

One Federal Reserve official seems to be reading the tea leaves correctly ("The Fed's Lone Star loner," News: Analysis & Commentary, Sept. 20). Living in Texas, Robert D. McTeer Jr. experiences daily the vast improvements in U.S. manufacturing, something those east of the Appalachians seem so insulated from.

The benefits of the wave of corporate restructurings of the 1980s and 1990s aren't over: There's a new strategic agenda among U.S. manufacturers that has propelled them ahead of their European and Asian counterparts.

That agenda is part Japanese (excellence in manufacturing quality and efficiency), part European (megamergers

and worldwide alliances), and driven by the most restless chief executive officers in the world (U.S.). It's a dynamite combination that promises to keep productivity growing and keep prices in check.

James K. Baker
Columbus, Ind.

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AT WORK

Businessman's volunteer spirit

Community activist
Anthony Sampson
urges young people to
visualize success.

By Tonya Stewart
Star Tribune

"If I can't help someone get back on their feet, I need not be here myself."

—Anthony Sampson
Athlete agent and community volunteer



making Committee, which oversees family values. And he's romantic. After an 18-month courtship, the couple married and created a blended family with their two children, Chanel and Reginald, and added a daughter, Ashley, to their family. "He's a fine fellow, a family oriented guy who places his relationship with God and his family in perspective," said Sampson. "He's determined to achieve and be successful." Sampson said only if he can help others along the way. "If I can't help someone get back on their feet, I need not be here myself," Sampson said.

—Tonya Stewart



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BY STEPHEN H. WILDSTROM

BOY, CAN THIS BOX PLAY GAMES

Sega's Dreamcast combines great graphics and speed—but it's not Networthy

I have to begin this column with a confession. The last computer game I was any good at was something called *Arknoids*, which mostly involved hitting a ball with a paddle, on the Apple IIgs. So I'm probably not the best person to be reviewing the games on the new Dreamcast console from Sega Enterprises. But I do look at a lot of hardware and software and can say with some confidence that the Dreamcast is an impressive demonstration of the performance that can be gotten from inexpensive hardware that tries to do one thing really well.

The \$199 Dreamcast is Sega's bid to recapture a place at the top of the TV-based game-console market now dominated by the Sony PlayStation and the Nintendo 64. The first thing you notice upon putting in a CD-ROM game and firing up the console is the amazing 3-D graphics. The Dreamcast display is easily the equal of arcade consoles and superior to even a fast PC. Key indications of the graphics quality: Characters and other objects move smoothly, both across the screen and forward and backward. Even as objects rotate, it's difficult to tell that, like all 3-D computer graphics, they are actually made up of a large number of triangles,

not smooth curved surfaces. And backgrounds almost never break down into blocky pixels the way they do in lesser displays.

LIMITS. This is all accomplished using what is modest hardware by computer standards. Dreamcast runs on a 200 MHz Hitachi S4 processor that would probably be dreadful at running Microsoft Corp.'s Word or Excel but is optimized for 3-D graphics. And it gets a big boost from a specialized NEC graphics-processing chip and 8 megabytes of video memory.



It takes more than great graphics to make a realistic game. For example, the \$49.99 *NFL 2K* football game from Sega is based on extensive motion studies. The team members look like well-drawn 3-D cartoon figures, but they run, pass, and block like real football players. Some clever programming creates a TV-style play-by-play commentary that is closely tied to the action on the field—and is even more annoying than the real thing.

The Dreamcast has the potential to be more than a game console, but it's not

clear where Sega plans to take the product. It includes a 56K modem, a Web browser, and a version of Microsoft's Windows CE operating system.

Right now, these provide limited utility. The modem and browser exist mainly to let players get the information on available games and play tips on Sega's Dreamcast Network site. Owners can connect either with an existing Internet service account or use bundled software to set up a new account with AT&T World Net starting at \$9.95 for 10 hours per month. The Web browser can also be used to visit any site, but the quality of the television display is poor, and navigation using a game controller is difficult. (An optional \$25 keyboard is a big help.) Next year, Sega will add online gaming.

The role of Windows CE in the Dreamcast is a mystery. None of the games from Sega or others runs under CE, and even the Web browser comes from Planetweb, not Microsoft. Sega says it included CE to make it easier for developers to write games for both Windows 98 and the Dreamcast. But there's no evidence that game makers see that as much of an advantage—or that Sega has any plans to use the operating system's ability to eventually make Dreamcast into more of a general-purpose computer.

When the Dreamcast sticks to playing games, it is impressive. That it doesn't do other things particularly well should neither surprise nor disappoint. The lesson of a product like Dreamcast is that a specialized device trying to do one thing well can run rings around a general-purpose computer costing 10 times as much.

BULLETIN BOARD

HARDWARE

SMARTER MICE

Computer mice are generally trouble-free—until a buildup of dust and other detritus clogs the mechanism that tracks movement of the ball. Then they become unreliable or just quit. Microsoft's IntelliMouse Explorer solves



the problem by eliminating most moving parts. Instead of a ball, a camera tracks movement of the mouse across just about any surface. In addition to the standard two buttons, the \$75 IntelliMouse has a wheel that controls scrolling in most applications. The mouse attaches to a PC with a universal serial bus connector, or, with an adapter, to a standard mouse port.

CARRYING CASES

If your laptop leads a hard life on the road, you might consider a really tough case. Zero Halliburton (800 312 2247 or www.zerohalliburton.com), well known for its cases, offers two sizes of laptop holders, the \$169 Z5 and the \$199 Z5. Designed to protect a computer in a 3-foot drop to concrete, the cases will let you check your laptop as luggage—though you may want excess-value insurance against theft or loss. But security has a price. The cases weigh 4½ and 6 pounds, empty.

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SONY

The Private Life

By John Nathan

Houghton Mifflin • 347pp • \$26

SONY: MANAGEMENT BY WHIM

In the late 1980s, Akio Morita, the silver-haired, flamboyant co-founder of Sony Corp., embarked on the most costly shopping expedition of his long career. A visionary who believed that Sony's future lay in the convergence of hardware and "content" such as music and film, Morita eventually set his sights on Columbia Pictures Entertainment, with its two studios and a vast library of movie titles and television series. In September, 1989, after months of on-again, off-again negotiations, Sony agreed to pay the inflated asking price of \$3.2 billion and assume \$1.6 billion in debt.

What was the rationale for such a decision? According to John Nathan's *Sony: The Private Life*, it was motivated only by senior executives' desire to please the company patriarch. Even Morita, then Sony's chairman and CEO, believed that Columbia's price tag, originally \$35 per share, was exorbitant. In a closed-door meeting in August, 1989, details of which have never been fully revealed, he told his seven top aides, who made up the decision-making executive committee, that he was abandoning the idea of the acquisition.

That would have been the end of it had Morita not voiced regret over dinner that evening with the committee members. "It's too bad," he lamented, according to one of those present. "I've always dreamed of owning a Hollywood studio." The next day, the group reconvened and promptly decided that Sony would purchase Columbia after all. In the weeks that followed, Sony upped its bid from an initial \$15 to \$27 a share and, by late September, clinched a deal that was ridiculed by industry experts. Initially, writes Nathan, Morita, the "born showman," reveled in the events his studio managers staged for him with the likes of director Steven Spielberg. But by 1990, he had shifted the respon-

sibility for the studios to Sony President Norio Ohga, who then delegated it to his protégé at the time, Michael P. Schulhof, president of Sony Corp. of America. In 1994, mismanagement forced Sony to write off \$2.7 billion and assume a loss of \$510 million for its Hollywood experiment.

Sony: The Private Life is filled with such insiders' tales, making it the most vivid and detailed account in English of the personalities who built the \$50 billion-plus consumer-electronics giant. Nathan, a professor of Japanese cultural studies at the University of California at Santa Barbara and a translator of Kenzaburo Oe's difficult novels, got access to dozens of executives who had contributed to or witnessed Sony's development since its 1946 founding in war-devastated Tokyo. He also talked to Sony's former key American managers, including Schulhof and Peter Guber, the Hollywood studio chief who almost drove Sony Pictures Entertainment, as it's now known, into the ground. Unfortunately, Nathan was unable to meet the two founders, both of whom were ailing when he began his interviews in mid-1997. Masaru Ibuka, the brilliant engineer, died in December of that year. Morita has been disabled since a 1993 stroke and is now in critical condition in a Tokyo hospital.

Nathan offers, however, only limited analysis of Sony, the corporation. And he tends to go over well-trodden ground: how Sony established itself in the U.S. and how it developed famous products or devices, such as the transistor radio, the Trinitron TV set, and the Walkman. Much of this has appeared before in articles and, to a lesser

extent, in books—including Morita's 1987 *Made in Japan*.

This is not to say that Nathan's has no point of view. The company's derlying problem, as illustrated in the Columbia case, is "that the environment in which the Sony Corporation has historically conducted its affairs is less public than personal: less rational than sentimental." Here, Sony might not be unique: Japanese founders of successful businesses tend to be passionate individualists, often driven by instinct rather than rationality. This holds at times even at long-established companies such as NEC Corp., whose electric and imperious former chairman Tadashi Sekimoto, for years poured money into pet projects, including Packard Bell in the U.S.

Nathan excels in profiling the berant Morita, who for many years ranked as the world's best-known Japanese. In 1960, determined to create a global business, he founded S-

American subsidiary built it into a major enterprise. In 1963, he moved his family to New York where for the next year and his wife, Yoshiko, immersed themselves in American ways in order to understand U.S. consumers. Morita came to be regarded as cosmopolitan but he remained somewhat of a Japanese patriot. It became evident in 1969 when he co-authored

Japan That Can Say No, a book that attacked the U.S. for its complaints about Japanese imports. His son, Fumio, explains: "He had to act as the international-understanding businessman in Japan.... But it was never real."

In conclusion, Nathan says that under the current leadership of President Nobuyuki Idei, Sony is emerging as a more rational company. Moreover, Idei's practical-minded managers are intent on reinventing Sony as an Internet company. From now on, says Nathan, "personal relationships are not important again to figure decisively." But how will this Sony fare? Nathan admits that the dazzling future is far from guaranteed.

BY IRENE M. M.

Kunii covers Sony as a Tokyo correspondent for BUSINESS WEEK.



MORITA, LIKE MANY OF THE GIANTS OF JAPANESE BUSINESS, WAS MORE PASSIONATE THAN RATIONAL

ROBERT KUTTNER

USE THE SURPLUS TO TRAIN TOMORROW'S WORKFORCE



THIRD WAY:
at Congress
right to do,
stead of
raising taxes
paying
down the
national debt,
to invest in
public
education

With President Clinton's veto of the Republican budget plan, fiscal politics is playing out as a simple two-way choice. Do we use most of the projected federal budget surplus for a tax cut (the Republican position) or to pay down the national debt and shore up Social Security and Medicare (the White House position)? So far, the Administration seems to be winning. Most voters prefer saving social insurance to tax cuts.

But this framing of the issue leaves out a third option—restoring some public spending. The surplus derives from three main sources: higher than projected economic growth, reduced interest costs, and sharp reductions in domestic spending. A third of the anticipated surplus is the result of the stringent caps that were the enforcement mechanism of the 1997 budget deal. Of the projected \$2.9 trillion, 10-year surplus, about \$900 billion reflects cuts in federal outlays.

As a result of the caps, both parties have become the party of reduced domestic spending. According to an analysis by the Economic Policy Institute (on whose board I serve), the Republican budget would cut non-defense discretionary spending by 20.1% over 10 years. But the Clinton budget would also cut domestic spending—by 6.4%. By 2009, even the Clinton budget would cut spending by 12.5% relative to 1997 levels. For example, the Republican budget would drop 430,000 children from Head Start. President Clinton's would drop "only" 112,000. So while Clinton proposes to use some of the surplus for favored domestic Administration initiatives such as 100,000 more schoolteachers and 50,000 more police, the White House is actually robbing Peter to pay Paul.

BADGE OF PARSIMONY. EPI economist Dean Baker, using data from the Office of Management & Budget and the General Accounting Office, finds that domestic public investment is now down to about 1.4% of gross domestic product, from an average of 2.4% two decades ago. Under the budget caps, it is projected to drop to 1% a decade from now.

The two-way debate should actually be a three-way choice: paying down the debt, vs. a tax cut, vs. restored public investments in human capital and needed infrastructure. Paying off the national debt is a needless badge of parsimony. Yet both parties are playing this pointless "fiscal responsibility" game, each

daring the other to flinch first by lifting the budget caps.

Throughout the postwar economic boom, the U.S. carried a very substantial national debt—over 100% of one year's GDP in the late 1940s. This debt was gradually reduced as a share of GDP thanks to robust economic growth. Even so, the annual deficit averaged about 1.2% of GDP between the Presidencies of Truman and Carter. Under Reagan, of course, the national debt grew far faster than did the economy, leaving an enlarged debt. Not until Clinton did either party equate budget surplus with fiscal virtue.

EDUCATION FIRST. Today's economic boom is partly the result of private entrepreneurship and partly the fruit of public investment—in education, infrastructure, and research and development. Under the budgets of both parties, all these categories of outlay are to be cut. What's restricting growth today is a shortage of skilled workers. But despite the new philanthropic interest in public schools, the private sector cannot be solely responsible for education. Whether one favors vouchers, charters, or traditional public schools, public education must be tax-supported.

Ironically, increased outlays for such national needs as education, training, research, and health care are highly popular with the voters. An ABC/*Washington Post* poll recently asked voters to rank their preferred uses of the surplus. Thirty-seven percent favored education and health spending. Social Security was next, favored by 29%. Only 19% wanted to reduce the debt, and just 14% wanted a tax cut. Polling by the Pew Center confirms that the top voter priority for the surplus is education spending, followed by Social Security and Medicare.

Both likely standard-bearers, Vice-President Al Gore and Texas Governor George W. Bush, are outdoing each other to champion education. But unless one of the candidates challenges the spending caps, this will largely be an exercise in posturing. Domestic public outlay is now at its lowest level in three decades and heading still lower. Federal education spending has dropped from 11.9% of total national spending on education in 1980 to 7.6% in 1999. This is bad economics and not even good politics. Only in Washington are surplus and further debt reduction equated with virtue. The voters want a broader choice, and they deserve one.

Kuttner is co-editor of *The Prospect* and author of *Prospect for Sale*

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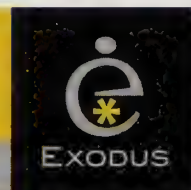
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BY GENE KORETZ

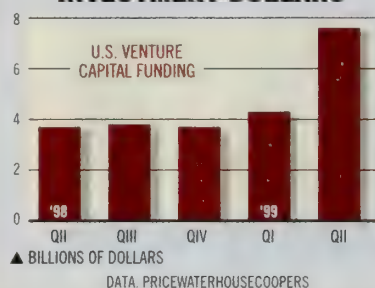
THE MAGIC OF U.S. VENTURE CAPITAL

Research probes its potent effects

There's no question that U.S. venture capitalists have made big bucks in recent years. But just how effective is venture capital in fostering innovation in the economy? In light of the link between America's economic performance and its technological prowess, this issue is receiving increasing attention from both economists and investors.

For one thing, the venture-capital business itself is exploding. PricewaterhouseCoopers, which tracks the indus-

A TORRENT OF INVESTMENT DOLLARS



try, reports that venture-capital investment in the second quarter of this year surged to a new high of \$7.67 billion. That's 76% above the previous quarter and more than double the year-earlier level (chart). Further, 992 companies received such funding, a new record.

The impact of this torrent of cash on America's technological lead could be considerable. A recent study of some 20 U.S. manufacturing industries from 1965 to 1992 by Samuel S. Kortum of Boston University and Josh Lerner of Harvard University found that venture capital produces six times as many patents as a similar amount of traditional corporate research and development spending.

After new rules in 1979 allowed pension funds to invest in higher-risk assets, Kortum and Lerner note, venture-capital investment exploded, rising tenfold by 1986—and patenting activity took off. Although venture capital on average has accounted for less than 3% of corporate R&D in recent years, they estimate that it has generated as much as 15% of U.S. industrial innovations.

Supplying cash, however, is only part of the venture-capital story. Just as im-

portant, say Thomas F. Hellmann and Manju Puri of Stanford University Graduate School of Business, is providing focus and guidance. In a study of some 170 emerging companies in Silicon Valley from the mid-1980s to the mid-1990s, the two professors found that companies pursuing an "innovator" strategy—aimed at being first in their markets with a new product—are more likely to get venture financing than those developing a product that has existing competition.

What's more, Hellmann and Puri report that among all "innovators," those with venture capital brought their product to market far faster than those without it. Among "imitator" companies, by contrast, the presence of venture backing had little or no impact on a product's launch time.

In short, the evidence indicates that venture capital has been especially beneficial to innovative startups. "Particularly through their active participation on company boards, venture capitalists provide critical guidance and help recruit key managers," says Hellmann.

"The big question," he adds, "is whether the mega venture funds that have sprouted up in recent years will be spreading themselves too thin to provide that kind of hands-on support."

GLOBAL DEMAND FOR MANAGERS

Asia and the U.S. are especially hot

If you want proof that the global economy is on the upswing, take a look at the demand for top managers. According to Korn/Ferry International's latest worldwide survey, global demand for executives in the \$150,000-plus range was up 22% in the second quarter over its year-earlier level. Significantly, Asia/Pacific led the parade in openings, with a sharp 40% rise, followed by 26% and 19% gains in the U.S. and Europe. Even troubled Latin America posted a 7% rise.

The regional industry breakdown is also revealing. Advanced technology led all sectors in hiring needs in both North America and Asia, but lagged behind financial-service

companies and manufacturing in Europe. By contrast, industrial and consumer products companies accounted for half of Latin demand.

INVESTING IN HIGH R&D STOCKS

It's a lot trickier than it seems

Here's a puzzle: One stock-market investor each year puts his cash in unglamorous companies, such as utility or cement producers, that spend relatively little on research and development. Another invests only in such industries as pharmaceuticals, biotechnology, and computers, that spend heavily on R&D. Which one would have come out ahead over the 1975-98 period?

The surprising answer, according to a new study by economists Louis Chan, Josef Lakonishok, and Theodor Sougiannis of the University of Illinois, is that neither would have been a winner. Both investors, they report, would have earned the same 19.5% year over the 23-year period. In fact, the historical record suggests that investors wouldn't necessarily reap a return over the long run simply by investing in high R&D spenders.

That may disappoint those analysts who believe that the market tends to undervalue R&D outlays. Such spenders, they note, is treated as a current expense in financial statements even though it produces intangible assets with extended lives. By reducing current earnings and book values, the expensive R&D raises price-earnings ratios and lowers the book value of equity. And purportedly makes the stocks of R&D-intensive companies look inordinately expensive to many investors.

The new study suggests, however, that the market overall does recognize the value of R&D spending and efficiently reflects it into prices. Still, the researchers do spy two R&D-related inefficiencies that could pay off for canny investors: Growth stocks with very strong R&D spending relative to sales did perform better than other high-flying stocks whose companies invested less heavily in R&D. And, significantly, low p-e and price-to-book stocks whose managements continue to spend heavily on R&D relative to market value earned a hefty 6.2% more a year than other "value" stocks.

"Other things being equal," Lakonishok, "if you're choosing between two glamour or low-priced stocks, you'd be better off with the higher R&D comp-



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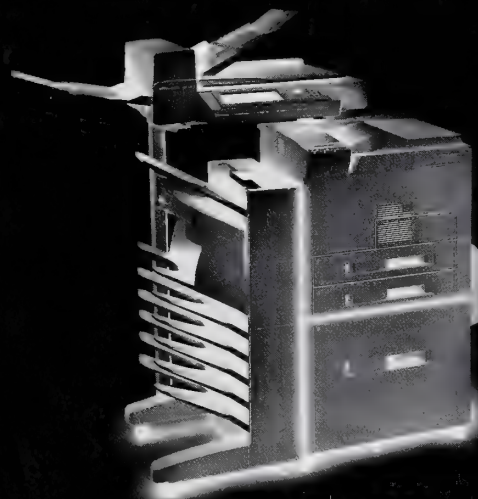
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NOT TOO HOT, NOT TOO COLD JUST RIGHT

Economists see growth slowing just enough to keep the expansion going

U.S. ECONOMY

You can stop worrying about an overheated U.S. economy could lift inflation and provoke more Federal Reserve interest-rate hikes. The economic forecasters see some good news for 2000. They say that, while world growth will boost U.S. exports, U.S. demand will finally cool off, and productivity gains will offset any potential inflationary problems from tight labor markets. So they believe the Fed is on hold, probably for a while. Ah, if they could only be right this time. Business economists, who gathered in San Francisco Sept. 26-29 for the National Association for Business Economics annual meeting, generally believe that U.S. economic growth will slow from an expected 3.8% this year to 2.7% next year. That's based on an NABE survey of forecasters (table). Once again, it's the Goldilocks test: not too hot, not too cold—a mix that will satisfy everyone from Wall Street to Main Street as the longest expansion in the postwar era.

FORECASTERS TAKE AIM AT 2000

	ACTUAL*	FORECAST*	
	1998	1999	2000
P	3.9%	3.8%	2.7%
ATION	1.6	2.1	2.3
OYMENT	4.5	4.3	4.4
REASURY	4.78	4.70	5.00
REASURY	5.58	5.80	5.99

*ANNUAL AVERAGES

TA: NATIONAL ASSOCIATION FOR BUSINESS ECONOMICS

*ANNUAL AVERAGES

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which will not prevent the trade deficit from widening further, as imports keep gaining ground. However, the gap's drag on overall growth will be considerably less next year compared with this year. The unemployment rate, after averaging 4.3% in 1998, will settle in at 4.4% in 2000, they say, with only a slight pickup in consumer inflation, from 2.1% to 2.3%. Why so tame? Partly because 93% of the forecasters believe that the trend rate of productivity growth has accelerated to about 2%.

PROBLEM

is that forecasters have consistently underestimated economic growth in recent years. But if there's another undershoot for 2000 could have heavy implications for inflation and interest rates, as world demand begins to put additional pressure on U.S. labor markets and production capacity. Unlike past years,

the Fed is already sufficiently concerned about inflation prospects to have put through two rate hikes this year.

Although the forecasters' best guess is that the Fed won't raise interest rates any further, they believe that the risks are all on the side of higher rates. For now, the threat of another hike at the Fed's Oct. 5 policy meeting appears to have receded, given tame August inflation reports on consumer and producer prices, cooler September readings on payroll gains and wage growth, and the wait-and-see tone of the Fed's statement following its Aug. 24 rate increase.

In addition, the stock market's 8% drop since Sept. 9, measured by the Dow Jones industrial average, will likely provide another reason for holding off on another hike. The NABE economists generally agree that the wealth effect from the market's runup has been a big factor in propelling consumer-spending growth well in excess of income gains, and an extended flattening out of stock prices would dampen spending growth next year.

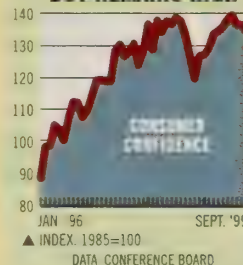
If overall economic growth turns out to be stronger than projected, the economists think the most likely source will be faster-than-expected inventory growth, given that stockpiles have become extremely lean relative to sales. On the downside, the forecasters are most worried about a stock market correction that could slam consumer spending and business investment. Indeed, 40% of the economists surveyed think that the stock market is sufficiently overvalued that it represents a financial "bubble."

CONSUMERS WILL BE THE KEY

to achieving the economists' cooler pace of growth next year. So far, households show little inclination to rein in their spending, but consumer attitudes may be starting to shift at least a bit (chart). The Conference Board's index of consumer confidence dipped for the third month in a row in September, probably reflecting higher borrowing costs, especially mortgage rates, and perhaps some jitters over the stock market.

However, the index is down only five points from its June peak, which was the highest reading in three decades. The board noted that consumers remain gen-

OPTIMISM DIPS, BUT REMAINS HIGH



erally optimistic about both the economy and job prospects, and that the dip in confidence did not portend any dramatic shift in spending patterns. Indeed, consumer spending in the third quarter appears to be growing at an annual rate of greater than 4%, down only a notch from the 5% pace of the previous year.

THE ONE AREA where consumer demand is slowing is housing, clearly reflecting the rise in 30-year fixed mortgage rates from 6.7% earlier this year to 8% recently. August sales of existing homes declined for the second month in a row, and purchases of both new and existing homes are off their recent peaks. Further strength this year is unlikely, given the declining trend in mortgage applications to buy a home.

Still, housing activity should remain at a high level, supported by strong job growth, high confidence, and past stock market gains. Despite the recent leveling off, demand remains strong enough to create spot shortages of construction workers and some building materials.

Moreover, there is little evidence of any significant waning in capital spending, especially in high-tech gear. Earlier speculation was that business expenditures would surge early this year ahead of Y2K, only to fall off sharply in the second half. However, orders for computer-related equipment and electronic components have remained strong in recent months, although orders for more traditional heavy equipment have been softer.

The latest evidence: Manufacturers' orders for durable goods rose 0.9% in August after a very strong 4% increase in July, and bookings for capital equipment showed large gains in both months (chart).

Ongoing strength in the economy is consistent with the NABE forecasters' scenario, however. Their quarterly projections put economic growth in the second half of 1999 at 3.6% in both the third and fourth quarters. In early 2000, though, they expect "some gyration in economic growth" related to the Y2K computer problem, which could result in some temporary loss of output, most likely as companies unwind any precautionary inventories they had built up in late 1999. The economists expect growth to slow to 2% in the first quarter of next year.

The ironic note at the NABE's meeting was that this year's theme was "Managing Risk." At a time when economists were releasing their blue-sky forecasts for 2000, they were also concerned about how to deal with the increasing likelihood that something could go wrong. Let's hope the forecasters are right. If we could be confident of that, there would be a lot less risk for everyone to worry about in the first place.

CAPITAL SPENDING REMAINS STRONG



SPAIN

SOMEBODY TURN DOWN THE HEAT

The euro zone's one-size-fits-all monetary policy is proving to be too loose for Spain, the euro bloc's fourth-largest and second-fastest-growing economy. Because fiscal policy is not sufficiently tight to offset the stimulus from the European Central Bank's 2.5% policy rate, which was cut in April from 3%, Spain is in danger of overheating.

Spain's Cabinet approved a 2000 budget on Sept. 24 that projects economic growth of 3.7% next year, the same as in 1999, and a drop in the budget deficit to 0.8% of gross domestic product, from 1.4% this year. However, deficit reduction is coming solely from the revenue side, boosted by the strong economy, while outlays are set to rise 4.7% next year, partly reflect-

ing spending programs designed to lift employment, civil service pay, and minimum pensions.

The budget, the last before next year's elections, is expected to be passed in December. Unemployment,

at 15.9% in July, is projected to fall to 14.2% next year. That's down from a peak of more than 24% five years ago, but it's still the highest in the euro zone.

The government projects inflation to fall to 2% in 2000 from 2.4% in 1999, but private analysts, who generally

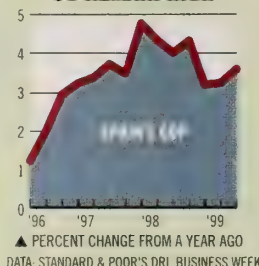
agree with the government's growth forecast, say the inflation target is overly optimistic. Inflation accelerated to 2.4% in August, above the ECB's 2% ceiling and matching April's 27-month high. The government is expected to

institute a second set of inflation-containment measures, the first coming April after the ECB's rate cut. The surge in oil prices—to \$25 per barrel on Sept. 29—is a particular concern.

Inflation will likely rise further amid continued strong economic growth, reported at 3.6% in the second quarter, compared with a year ago. Growth continues to be driven by domestic demand, up 5.3%. Retail sales in July were especially strong and the stimulus from the ECB's April rate cut has not yet been felt.

But now foreign demand, which has been a drag on growth, is starting to pick up, thanks to recovering European economies, which account for 70% of Spain's exports. Given its own policy choice, Spain would likely opt for higher rates right now, but the ECB is unlikely to move until recoveries in Germany and France are more firmly in place.

GROWTH IS EXPECTED TO REMAIN HIGH



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NOW IT'S A RACE

Bradley's gutsy agenda
puts Gore on the defensive

Any lingering thoughts that Bradley is just Al Gore with basketball were dispelled Sept. 28. In a major speech, Bradley laid out an ambitious proposal to provide health care to almost all Americans, including mandatory coverage for children. The sheer audacity of the plan—and its billion-a-year price tag—has some Democratic critics labeling him an unrealistic opportunist and Republican missing him as a dreamy-eyed liberal.

But Bradley's health-care gambit got Gore's attention. The next day, he acknowledged that he faces a "tough" primary and challenged Bradley to a series of debates. The Veep also announced that his faltering, inside-the-Beltway campaign would relocate its headquarters from Washington to Nashville.

Suddenly, the Democrats are in a horse race. With his health plan, an earlier campaign-finance proposal, and his work/family issues and child protection soon to come, Bradley is delivering his "Big Promises" agenda. Gore, pleading for "a bunch" of debates, is really a ploy of underdogs, is elevating his opponent to major-candidate status. **BROAD APPEAL** More important, Bradley is making inroads outside the Democratic base: among moderates and independents, male baby boomers, and young voters. So why is he shifting left on issues ranging from health care to gay rights? Answer: Bradley is gambling that he can assemble an army of discontented liberals to pry the nomination away from Clinton. Once he has that prize in hand, he can worry about mending fences with conservatives and moderate Republicans.

Right now, the Democratic insurgency is riding a wave of favorable publicity. A Sept. 21-23 CNN/Time poll showed Bradley pulling ahead in New Hampshire. And in some national polls, he is faring better than Gore against Republican front-runner George W. Bush. "Many Democrats think Gore is unimpressive," says independent New Hampshire pollster Dick Bennett.

Like Ronald Reagan in his successful 1980 campaign, Bradley is portraying himself as a bold leader of strong character whom voters can trust even if they don't always see eye-to-eye with him. Indeed, Bradley bought new television ads in Iowa and New Hampshire Sept. 26 that declared: "Sometimes you'll agree with me and sometimes you won't. But at least you'll know exactly where I stand...."

Even if Bradley is not as charming a speaker as Reagan, he exudes a confidence with himself—an anti-charisma—

rently appeals to voters weary of aged pols. "This is the year of the sick candidate, so his lack of charm and his lack of finesse is a real selling point," says Democratic consultant Jen Laszlo. "Reagan was 'wrong' on all the issues, but he won because he liked him." Even the co-chair of Senator John McCain's campaign, New Hampshire Senator Warren Rudman, concedes: "You may not agree [Bradley], but you can trust him." That image will make it tough for backers to successfully portray Bill as a cynical opportunist who is reversing many of his positions to win liberal primary elections. But in fact, Bradley has headed left. In Iowa, he cozied up

to corn growers by endorsing ethanol subsidies, even though he opposed such breaks in the past. While Senator Bradley voted several times for experimental school-voucher programs, candidate Bradley opposes all voucher proposals—as do the powerful teachers' unions. And to appeal to Teamsters, trucker Bradley now wants to keep out can truckers from entering the industry—at least for the near future. Bradley's most dramatic tack left, though, is on health care. Unlike Hillary Clinton's unpopular 1994 proposal, Bradley's would not replace the

existing private health-insurance system. Instead, he would require parents to purchase insurance coverage for their kids, with the government subsidizing low-income households. Families could either include children in employer-sponsored plans or one offered by the Federal Employee Health Benefits Program, which covers all government workers. Adults also could opt into the FEHBP. Insurance premiums would be tax-deductible. And the elderly would get free prescription drugs under Medicare for chronic illnesses. In essence, Bradley proposes to use the bulk of the non-Social Security surplus for health care rather than tax cuts.



THE DEMOCRATS

Business reaction to Bradley-care was mostly favorable. The tax-credit approach is "well thought-out and sensible," says R. Bruce Josten, senior vice-president at the U.S. Chamber of Commerce. Health Insurance Association of America President Chip Kahn praises the overall plan but worries that it "would lead to expensive patient-protection mandates" by Washington.

Certainly, Bradley's health plan has faults. Critics immediately pounced on what they see as low-ball cost estimates. Tax deductions for health premiums would come to \$5 billion in the Bradley plan; similar breaks were pegged at \$8.5 billion in the just-vetoed GOP tax-cut

bill. While Bradley says he can provide the elderly with a prescription drug benefit under Medicare for just \$10 billion, a similar proposal by President Clinton would cost twice that. And Bradley is silent on how he would stop employers from dropping corporate health plans and forcing employees to buy government-subsidized policies.

Still, it may be tougher than Republicans think to peg Bradley as outside the moderate mainstream. He worked closely with Reaganites on the 1986 tax-reform battle and has won friends in Corporate America by championing free trade, fiscal discipline, and tax reform.

Thus far, Bradley's deepest appeal is among independents. He scores particularly well with male boomers who recall his exploits on the basketball court. "I call them the NBA Dads," says independent pollster John Zogby. "He has crossover appeal that brings guys back into the Democratic fold."

Twenty years ago, Ronald Reagan laughed off criticism that he was a dangerous extremist with a jocular "there you go again." Bill Bradley is charging ahead now, but like Reagan, he must disarm the skeptics. That will be trickier as they realize that Big Promises may also mean more Big Government.

By Richard S. Dunham, with Howard Gleckman, in Washington and Lee Walczak in Los Angeles

JUST 'TELL PEOPLE WHAT YOU BELIEVE'

minutes after Bill Bradley laid out his national health-care proposal in San Diego, Calif., on Sept. 28, Washington Bureau Chief Lee Walczak caught up with the Democratic insurgent and former basketball star for a little one-on-one. Energized and articulate, Dollar Bill demonstrated that he hasn't lost his jump shot.

Q: What is the fate that befell the Clinton administration's 1994 health reforms, what makes you think your plan for covering the uninsured and expanding health care to all children is doable?

A: My analogy is to tax reform. In 1982, I laid out a tax bill. We talked about it for years and found common ground. If you do big reform, that's what you have to do. Tax reform brought together Republicans and Democrats. There, the objective was

the lowest possible rates and fewest loopholes. Here, the objective is to see that at least 95% of the American people have health insurance.

LEFT BRAIN

“The objective is to see that at least 95% of the American people have health insurance”

Q: Isn't your plan vulnerable as an extension of Big Government?

A: This is not a giant federal bureaucracy, as universal coverage

would be in the traditional European model. This is not an expensive mandate on the backs of small business. This is an effort to give parents the ability to insure their children and working families the ability to get [affordable] health care. Government's role is to do what government does best, which is to look out for the well-being of all citizens, while private insurance provides coverage through the private sector. So I do not see how this could be viewed as a giant government program. It is a lot of money. But if we can't do this now, during such a good economy, when will we be able to do it?

Q: At \$65 billion a year, your plan pretty much uses up that part of the projected non-Social Security budget surplus Republicans want to use

for tax cuts. So, no tax relief?

A: The goal is for a plan at the end of the first term, and the surpluses will continue to be significantly large. It certainly would preclude a \$792 billion [GOP] tax cut, no question about that. That's something we have to face up to: Who are we as a people, and what do we want? Having all Americans with access to affordable health care is something that will strengthen our social fabric, which will strengthen the economic foundation for our country. Healthier workers are more productive workers.

Q: Isn't the current prosperity causing politicians to strain a bit as they search for new things to promise voters?

A: There's a difference between promising a few big things and promising hundreds of other things that appear small but grow big over time.

Q: You're referring perhaps to Gore's "micro-policy" approach?

A: Yeah. The two health plans offered by the Vice-President and me are the best example yet of the difference between a big idea and creeping incrementalism.

Q: The early take on your campaign was that you would blend liberal and more conservative policies in a form of left-right fusion. But so far, most of your stands have been left-of-center. Where's the "right" element in your fusion formula?

A: Take Russian aid—I say that's money down a rat hole. NATO expansion—against.

Q: Do you still intend to issue an economic manifesto laying out your plan for future growth?

A: Yes. The key to economic growth in the future is open markets, free flow of capital, the lowest possible tax rates, affordable health care, and greater investment in education and research.

Q: Can you really promise to do much better than Bill Clinton, Al Gore, and Alan Greenspan when it comes to economic performance?

A: One of the President's soundest

accomplishments was passage of the 1993 budget act, which I voted for, and passage of NAFTA and of the World Trade Organization, which I was the point man on. Those things have produced a good economy. But they're not nearly as important as the entrepreneurial dynamism and technology behind the Information Revolution. You can't underestimate the improvement in productivity that will come from technological advance. We're in a new world.

Q: Why haven't you joined the candidate stampede to call for Greenspan's



RIGHT BRAIN

“Take Russian aid
—I say that's money
down a rat hole. NATO
expansion—against”

reappointment as Fed chairman?

A: As a candidate for President, you don't announce your appointments in the middle of a political campaign. I was skeptical at the beginning, voted for him during his second confirmation, and think he's done an outstanding job. But America would be a poorer place if one thought he was the only person who could do that job. The key characteristic of someone who is Fed chairman is the con-

fidence of the financial markets. Anyone you appoint would have to have that kind of stature and instant credibility.

Q: Are you concerned that, with Congress busting spending caps and dreaming of ways to spend the future surplus, fiscal policy is getting too loose and monetary policy may have to contract?

A: What Congress is doing is a lot of small things. It's very disturbing. You have to have some discipline. The key should be not increasing the deficit. Some of the surplus money ought to be used for reducing the federal debt. If it's choice between tax cuts and reducing the federal debt, I'd choose the latter, because that's really a reduction in future interest rates.

Q: You've told union audiences that NAFTA needs new worker and environmental protections. A little Dick Gephardt-style revisionism, maybe?

A: No, no—not at all. What I said to labor audiences was that there would be winners and losers, and we ought to help the losers through health insurance. Since a lot of them have health insurance anyway, they didn't seem too appreciative.

Q: Ever since the General Agreement on Tariffs & Trade and NAFTA, free-trade expansion has seemed at a standstill. Can the agenda advance?

A: I don't think [free trade] has topped out. But we have to give a compelling reason why it is important, and that means giving people more economic security. A time of this enormous change. Globalization is positive, not negative. To prevent a return to protectionism, you have to deal

with the reality of people who lost. You do that not by putting up trade barriers but by meeting some of their direct needs.

Q: Your new ads call your crusade “a different kind of campaign,” yet your differences with Gore don't seem enormous. Are we just selling “the Uncola” here?

A: It's different to tell people what you really believe.



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THE ECONOMY

WHO'S AFRAID OF PRICEY OIL?



Why the recent hikes at the pump don't worry Alan Greenspan—or those sport-ute-loving consumers

If you're looking for signs of inflation in the U.S. economy, look no farther than the nearest gas pump. Since hitting a 12-year low of \$11 a barrel last December, oil prices have more than doubled to just above \$25, the biggest hike in such a short time in modern history, except for times of ma-

jor turmoil in the Middle East. What's worse, the increased prices come when the U.S. gets more of its oil from overseas than ever, and the U.S. trade deficit is hitting record highs. In an economy already running in high gear—in giant sport-utility vehicles, no less—the surge in petroleum prices certainly seems to spell trouble.

So far, though, hardly anybody seems to care. Consumers continue to buy gas-guzzlers at a record clip. The stock market has noticed the jump in oil, but nervous investors seem to be responding mostly to the dollar, gold, and the apprehension over what's ahead for the economy (page 42). Even at the Federal

HEADING UP: Airlines will lose the windfall cheap fuel brought in 1997.

Reserve, where Chairman Greenspan scans the horizon for inflation, oil prices—at their highest level since the start of 1997—barely appear on the radar screen. Greenspan believes the diminishing role of oil in the economy reduces the inflation threat from rising prices. Now, economists and market watchers no longer expect the Open Market Committee to raise short-term interest rates on Oct. 5.

To be sure, oil remains crucial to everything from transportation to heating fuels to petrochemicals and

IT HAPPENS WHEN RICES DOUBLE

ECONOMIC GROWTH

estimate, GDP growth for next will be 0.3 percentage points lower than what it was in 1997. Higher fuel prices had not surged.

CORPORATE PROFITS

But, it's a mild damper. Worst: Airlines and other transport and shipping companies. Higher fuel prices have cut \$116 million from major airlines' third-quarter profits.

INFLATION

Over the last six months through September, overall energy prices have risen at an annual rate of 3.1%, while everything else has risen at a 1.9% rate. The Fed's target rate: 3.1%.

INTEREST RATES

Because of their volatility, the Federal Reserve gives less weight to energy prices when deciding whether to raise rates. But, more, higher fuel prices themselves cool the economy by taking money from consumers' pockets.

DATA: BUSINESS WEEK

And there's no way to avoid the effect of higher energy prices: Sooner or later they show up in higher prices for goods and services or lower earnings or both. But there are reasons not to panic. First, there's no guarantee that these high prices will persist despite OPEC's impressive compliance with a production-restraint deal last March. Investors are betting that prices will fall: The New York Mercantile Exchange contract for oil to

be delivered a year from now is just under \$20 a barrel. Even oil company stocks are still well off their highs, despite strong indications of profitable third and fourth quarters.

Second, oil doesn't matter as much to the overall economy as it once did. As Greenspan puts it, America's economic output is getting lighter: more software, less steel. The result of that shift is that the amount of oil and natural gas required to produce goods and services has fallen by nearly half since the 1970s, from 14,600 British thermal units per inflation-adjusted dollar of gross domestic product in 1973 to 7,700 BTUs this year, according to the Energy Dept.'s Energy Information Administration (chart).

What's more, even if the Fed were worried about high oil prices being inflationary, it's not clear that raising interest rates would be the right response. After all, the purpose of a rate hike is to cool an overheated economy. But an oil-price rise alone tends to do just that. It chills the economy because it diverts consumption spending offshore, to foreign oil producers.

Even now, economists are factoring the effects of more expensive oil into their forecasts. Economic growth will be about 0.3 percentage points lower this year and next than it would have been if oil prices had simply drifted up slowly from last year's low point, according to Standard & Poor's DRI, a unit of The McGraw-Hill Companies, publisher of BUSINESS WEEK.

Raising rates would exacerbate the chilling effect of costly oil. "If anything, the Fed would say, 'Oh, dear, oil prices are taking money out of consumers' pockets. We'd better loosen monetary policy,'" says Cynthia M. Latta, principal U.S. economist for DRI. Given what's going on in the rest of the economy, Latta doesn't actually think the Fed

would cut rates; but then again, a hike may be just as unlikely. San Francisco Fed President Robert T. Parry almost said as much in a Sept. 27 speech: "With high uncertainty about the future, a somewhat delayed action could be preferable to running the risk of tightening when it's not warranted."

On a micro-economic level, rising energy prices are already crimping earnings expectations in some sectors—airlines, railroads, and truckers, in particular. Airline analyst Susan Donofrio of Deutsche Banc Alex. Brown is forecasting that higher fuel prices will reduce profits for the 10 major U.S. carriers by \$116 million in the third quarter and \$213 million in the fourth. In 1998, she figures, lower fuel prices added \$1.2 billion to the majors' bottom line.

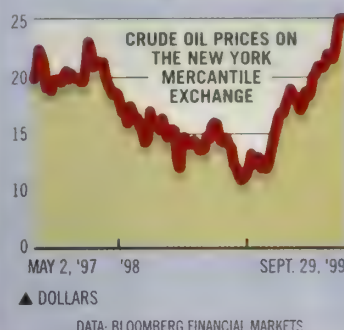
Now, that fuel has moved in the opposite direction, it's payback time. The carriers that do the least to lock in their fuel costs—Alaska, Southwest, TWA, and USAirways—are feeling the biggest impact from the 30% to 45% increase in jet-fuel prices over the past year, says analyst Brian D. Harris of Salomon Smith Barney. On the other

hand, airlines that don't employ hedging strategies reap the biggest savings when jet-fuel prices fall. "Comparatively, it's painful," says Southwest Airlines Co. CFO Gary C. Kelly. "But we're still very profitable at these energy price levels. We just don't have the kind of windfall we had last year."

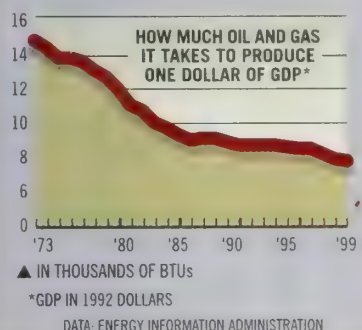
HURT. Among the first public victims of higher fuel prices was FDX Corp. The Memphis-based parent of Federal Express Corp. says higher fuel prices slashed \$27 million from operating profits in its first fiscal quarter, ended Aug. 31, and could cut them by more than \$150 million for the full fiscal year if current trends continue.

One unit of FDX, Viking Freight Inc.,

CRUDE PRICES KEEP CLIMBING...



...BUT DEPENDENCE IS FALLING



In an economy where software is more important than steel, oil prices simply don't matter as much

imposed a 1% fuel-adjustment surcharge on its customers starting in August, and CFO Alan B. Graf Jr. said in September that adding surcharges in other units is "a very hotly debated topic within our company." In practice, however, most shippers swallow most or all of their fuel-cost increases. Norfolk Southern Corp., based in Norfolk, Va., is looking for cost cuts in other areas to compensate, says Curt Steele, assistant vice-president for material management at the railroad. "It has hurt us all," he says.

Oil prices would start to do more serious damage if they reached \$30 a barrel or more for an extended period, economists say. But that's unlikely in the absence of another Mideast conflict. In fact, if the price rises much beyond \$25 a barrel and stays there, new supplies would almost certainly come onto the market and pull prices down.

So far, the major Western oil companies, such as Exxon, BP Amoco, and Royal Dutch/Shell, have not increased exploration and production spending above their 1999 budgets, which were set when oil was at its nadir. Memories of the 50% decline in oil prices from 1997 to 1998 are still vivid: "Once bitten, twice shy," says Fadel Gheit, an analyst for brokerage firm Fahnstock & Co. But new technology is making it cheaper than ever to find and produce oil, so profit margins on \$25-a-barrel crude are enormous. The longer prices remain this high, the more E&P projects will be undertaken—and once they get under way, it's hard to stop them.

NO PROBLEM. That, in essence, is what your average American consumer is counting on. SUVs account for 18% of new-vehicle sales this year, up from under 10% in 1993, according to J.D. Power & Associates. And the fastest growth—35% this year—is in the fuel-hungry luxury segment, such as the Cadillac Escalade and Ford Excursion.

High oil prices? No problem, says Thomas N. Tyrrell, CEO of Republic Technologies International, an Akron company that makes steel bars for sport-utes and spent \$1 billion to update steel plants for the purpose, is betting that high gas prices won't kill the SUV market. Jokes Tyrrell: "The car companies make so much money on SUVs, they might even pay you for the gas."

Plenty of forces—tight labor markets, a falling dollar—could spur inflation and kill America's long-lived economic expansion. But, for now, it's not oil—or anything else—that's fueling inflation.

By Peter Coy in New York, with Wendy Zellner in Dallas, Laura Cohn in Washington, and Peter Galuszka in Cleveland

COMMENTARY

By Marcia Vickers

THIS CORRECTION MAY WELL HAVE A SILVER LINING

Are the fat times really behind us? As the result of an almost uninterrupted downward drift beginning on Sept. 23, the major stock-market averages have moved into bona fide correction turf. On Sept. 29, the Dow Jones industrial average and the Standard & Poor's 500-stock index sunk more than 10% off their highs for the year. But

higher the market has gone, lower and more uncertain the been: Seventy percent of the S&P 500 year-to-date came from the prices of just 10 stocks.

Why is this good for us? Market valuation levels should mean it will participate in the market's And the current correction, and

more small ones are a relatively way to move the onto firmer ground compared with a fall higher peak. A ant market will ly curb the voracities of overexuberant day-and speculators should make the less a gambling easing the extrahigh volatility.

A 10% correction the astounding the market hit not exactly a plateau there has to be a drop before it's erred bearish territory is, however, not in context of the performance in years: The S&P up only 4.1%, compared with 28% for all

and 33% in 1997. True, last year the market's percentage also in single-digit territory, but subsequent interest-rate cuts propit market to double-digit increase end of the year. It's highly unlikely scenario will repeat itself.

This therapeutic regimen is for two major reasons: inflation currency worries. Surging energy tight labor markets, and a weak dollar all point to rising inflation though the betting on the Street the Fed will not raise interest Oct. 5. "Though interest rates go up dramatically for the rest year, the direction is still up and down," says Douglas R. Cliggett equity strategist at J.P. Morgan



fear not. Analysts like Alfred Goldman, chief strategist at A.G. Edwards & Sons Inc., believe we'll be healthier in the long run. "Investors have gotten fat off filet mignon and the finest wine over the past two years," Goldman says. "Now, it's time for some veggies."

UNCERTAIN RALLY. The new diet may leave a bitter taste with investors, but it's good for the market. For one thing, it has at least temporarily deflated what Federal Reserve Chairman Alan Greenspan said in June were "unsustainable levels" in stock prices, perhaps making another interest-rate hike unnecessary this year. It has trimmed S&P 500 valuations from a lofty 1999 high of 28 times forward earnings to a healthier 25. That's particularly good because the

inflation remains somewhat, the market is fixating on the tough it has recovered a bit longer vs. the Japanese yen, the yen is far off its highs, making it difficult for Americans to buy all those cars and electronics. "A meaner look of the yen's upward stride occur before the U.S. market is," says George A. Murnaghan, ex-president at Rowe Price International Inc. in Baltimore. **PARISONS.** A weakened dollar with an improving global scene prompted both U.S. and foreign investors to pump more money into assets outside the U.S. That's also a dampener on American equities. "Starting to realize that the U.S. isn't the safe haven," says James M. Mulroney, market strategist at Aeltus Management Inc.

Analysts might get a bounce from the fourth-quarter earnings, which are expected to come in 22% and 21% higher, according to I/B/E/S Interactive. But that may not be a last-thing given the easy comparisons of the year's results, which were hurt by the economic meltdown. "There are no comparisons over last year, not complaining," says Joseph Mulroney, chief strategist at I/B/E/S. Confidence is also beginning to return, according to a study by J.P. Morgan. The first six months of this year, investors plowed more money into tanks such as cars, boats, and real estate, and they put into financial assets such as bonds, for the first time

in a year, nobody likes to stick to a strategy for fear, there may soon be opportunities to start picking up some reasonable prices. But investors expect a resumption of the bull market, double-digit gains without a change in underlying conditions. The risk-rate environment and a strong dollar could mean little or no returns for the rest of 1999, monitors warn. We could even be in a recession by year's end. The move toward being healthy for the economy is good news for long-term investors who have been patiently waiting for a buying opportunity, investors who are caught in a bind will have to eat their dust and hope there's still some life left in the market.

covers the markets for the week.

WHY GOLD IS PRECIOUS AGAIN

An extraordinary international sent prices skyward

When gold is soaring, inflation must be just around the corner, right? In fact, gold's stunning climb from around \$268 an ounce on Sept. 24 to as much as \$327 on the spot market on Sept. 28 was not about macroeconomics. "I don't think this has anything to do with inflationary expectations," says George Milling-Stanley, a market analyst at the World Gold Council. "I don't see the connection at all."

What's propelling gold to prices not seen since October, 1997, is the result of a concerted campaign by the mining industry and producer countries to persuade central banks to halt sales of their reserves. The gold gang put the screws to politicians everywhere, demanding that they stop the sales to keep producer countries from falling into economic despair. The effort included demonstrations by impoverished miners at the embassies of such gold-selling countries as Britain and Switzerland, impassioned exhortations by the likes of South African President Thabo Mbeki, and effective arm-twisting in the U.S. Congress.

The pressure helped persuade the International Monetary Fund this summer to hold off on planned gold sales that were supposed to benefit poor countries. The IMF plan withered after officials such as Ghanaian Mines & Energy Minister Fred Oshene-Kena complained that their economies were already "reeling" from the price slide. Facing similar complaints, on Sept. 26, 15 European central bankers promised to tightly limit gold sales for five years.

The gold campaign created extraordinarily strange bedfellows. North Carolina Republican Senator Jesse Helms

found common cause with Democrat Jesse Jackson Jr. and the Congressional Black Caucus in fighting the IMF plan. Former Canadian Prime Minister Brian Mulroney, a Conservative chum of former President George Bush, sided with Minority Leader Senator Thomas A. Daschle (D-S.D.). Some gold-backers worried about the health of African economies: More than two dozen Congressmen warned President Clinton in June that if gold prices stayed flat, "upwards of 800,000 Africans will be plunged into absolute poverty."

FLUMMOXED. Others fretted over gold's slide as a reserve commodity. Still others worried about the health of such producers as Toronto-based Barrick Gold Corp., where Mulroney is a director, and Colorado-based Newmont Mining Corp. "It's pretty hard to think of any sector of the economy where the lobbying has been as effective as this," says David Christensen, a top mining analyst at Merrill Lynch & Co. in San Francisco.

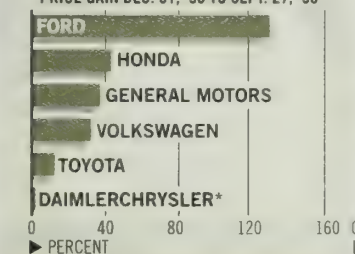
Of course, much of gold's plunge was because of politics as well: Prices collapsed after various governments, including Britain's, announced plans to sell reserves. President Clinton did his part by pushing

the IMF to dump some reserves to help heavily indebted countries. Many analysts, meanwhile, admit they're flummoxed by what the "natural" or market-clearing price of gold should be; some think \$325 is as good a number as any. So if you want to figure out if gold is heading to \$800 an ounce or back to \$270, pay attention to the politicians—and the folks who lobby them.

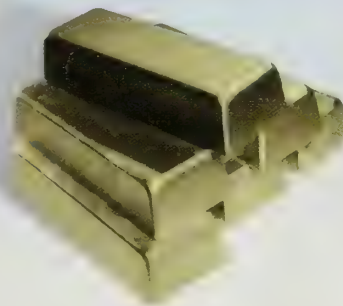
By Joseph Weber in Toronto

FORD'S STOCK LEADS THE PACK...

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Suddenly, Senator Jesse Helms found common cause with Jesse Jackson Jr.



E-BUSINESS

AMAZON.COM THROWS OPEN THE DOORS

The Web site is now available to all merchants—even rivals

Jeffrey P. Bezos has always bridled at the nickname pundits give his online superstore: "Wal-Mart of the Web." Because he's modest? No, the label isn't nearly grand enough for Amazon.com Inc.'s ambitious founder and chief executive. Bezos wants to create something entirely new—a place where consumers can find anything they want.

Now there's another way to think of Amazon—which Bezos may find just as inadequate: Mall of the Web. On Sept. 29, Bezos took the big step of opening the doors of its popular Web site to any manufacturer or retailer—even a rival—that wants to sell on its popular Web site. For a \$9.99-a-month fee plus 1.25% to 5% of revenues, a merchant can offer up to 3,000 products to Amazon's 12 million customers through a new service called zShops. And for a 60¢ fee and a

4.75% cut of sales, Amazon will let small merchants and individual sellers on its auction site accept credit cards.

Already, zShops offers 500,000 products—in all, 19 million items in inventory. If something's not available there, another new feature called All Product Search will comb the Web for it. "We're taking the exposure and the customer base and offering it to others," says Bezos. "For us, the win is becoming an even better shopping destination."

Bezos had already taken Amazon.com beyond simply duplicating retail stores online. It added auctions last March and bought stakes in other online merchants. But this is a quantum leap—from playing the Web's anchor store to trying to be its chief landlord as well. Says Ken Cassar, an analyst at market researcher Jupiter Communications: "Amazon in-

BEZOS: *This way, it can become "an even better shopping destination."*

tends to get its fingers into every action that happens on the Web."

Amazon needs to think big—if it fulfill the outsize hopes of investors. They value its stock at \$28 billion, more than Sears, Roebuck & Co. and Kmart Corp. combined. Yet Amazon remains unprofitable after four years in business, and it's expected to lose \$47 million in the just ended third quarter. One reason: It's spending \$30 million to build 5 million square feet of warehouse space. And because the company had added no new-product categories this year until July, when it opened toy and electronics shops, quarter-to-quarter growth has slowed 7%, from 33% a year ago.

BOFFO YULE. These changes—and a petition from eToys and new "e-tail" efforts by traditional merchandisers as Nordstrom—are putting pressure on Amazon shares. Recently, they were trading 40% below May's high of 100 before rebounding 23% on the September news, to 80%. Analysts like the potential for rental income and commissions from zShops tenants—most of which will go straight to Amazon's bottom line. With a boffo e-Christmas on the horizon, they expect Amazon revenue to jump to \$1.4 billion, up from \$610 million in 1998. Still, as a mall landlord, Amazon is taking on new risks. If a seller is fraudulent, Amazon's reputation could suffer—though it will compensate buyers up to \$1,000.

Moreover, the All Product Search could well hand off customers to rivals. And the jury is still out on the e-mall concept. Yahoo! and Excite have been running online malls for some time, but are customers flocking in? One specialty foods purveyor GreatFood is part of zShops, but CEO Ben Neuman concedes, "I wonder if the mall strategy is the right one."

Bezos insists it's a winner: zShops customers will wind up buying more from Amazon, he figures, especially as it moves into new areas such as travel. "The number of items that Wal-Mart can offer online will certainly pale next to what Amazon can sell," says Jupiter Communications' Cassar. For all the challenges, Amazon remains confident that even Wal-Mart must reckon with it.

Robert D. Hof in San Diego, Calif., with Steve Hirsch in New York

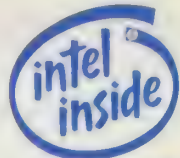
Amazon's Growing Reach

SHOPPING SERVICES

- ▶ On Sept. 29, announced zShops: Any retailer can set up shop on Amazon.com's site.
- ▶ Also launched All Product Search, allowing shoppers to find any product for sale on the World Wide Web.

MORE AMAZON STORES

- ▶ In July, opened toy and electronic stores on its Web site.
- ▶ Bought 49% of sports site Gear.com in July, 54% of Pets.com in June, 35% of HomeGrocer.com in May, and 46% of drugstore.com in February.



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WORKPLACE

LOOK FOR THE UNION LABEL —AT IBM?

Organizers are rallying workers angry about pension cuts

For years, Lee F. Conrad was a lonely guy. Sometimes, the only employees he could lure to meetings about unionizing IBM's Endicott (N.Y.) plant were a few buddies. Even in the midst of massive layoffs and corporate downsizing during the early 1990s, Conrad and organizers at other IBM plants couldn't drum up enough supporters to call for a union vote. After a while, he gave up. "I was semiretired from all this," he says.

of 140,000. But some workers feel Big Blue didn't go far enough. "They need to offer the choice to everybody," says Conrad. "When they try to throw a bone out, it just doesn't work."

IBM insists it must go forward with the overhaul if it is to stay competitive in an industry where three out of four rivals skip the expense of pensions or simply offer less costly plans such as 401(k)s. The changes, IBM says, would allow it to increase other types of com-

wide organizing plan similar to intensive campaigns it has launched for collar workers at AT&T and the Bells. Whereas CWA organizers in the past have concentrated on only a few IBM facilities, CWA organizer Jeff Lacher says this time the union already has worker committees set up and running at 10 locations all over the country. The union also is claiming thousands of recruits who have signed petitions calling for a union vote. They refuse, however, to disclose specific numbers. Given past difficulties of organizing, Lacher says the CWA plans to wait at least a 60% show of support at a facility before demanding an election, even though federal law requires a union to garner only 30%.

IBM insists the union activity is widespread. The company, which has not made an executive availa-



BIGGER BLUES: Union members lead a march near an IBM Vermont plant

That was before IBM Chairman Louis V. Gerstner Jr. started mucking around with pension plans. Now, Big Blue is facing the first serious threat in years that the company's 140,000 U.S. workers could be unionized. The Communication Workers of America (CWA) are rallying angry veteran employees from Burlington, Vt., to Austin, Tex., to San Jose, Calif., who feel betrayed by IBM's recent efforts to overhaul the pension plan in ways that in effect would cut their benefits. Workers claim, in fact, that benefits for most midcareer workers would have been cut by as much as 40%.

Gerstner is trying to avoid a showdown with workers. On Sept. 17, IBM modified its controversial plan, doubling the number of workers eligible to stay in the old pension system to 65,000 out-

pensation, such as stock options. But options, too, are a sore subject: In 1999, only 25,000 of IBM's 290,000 global workforce will be offered options. That's 9% of the workforce, vs. 15% at other high-tech companies.

"ONLY SOLUTION." Meanwhile, IBM is cutting back some health benefits and overtime pay. Employees also complain about the increasing number of temporary workers and how some full-timers are not getting raises, even after rave performance reviews. "I have always been against unions," says Calvin Aranson, a 25-year employee at IBM's Global Services unit in Portland, Ore. "Like a lot of IBM employees, I have come to the conclusion that, when dealing with IBM, a union is the only solution."

So the CWA is rolling out a nation-

WHAT ELSE IS EATING IBM WORKERS

- ▶ Despite spectacular earnings, periodic layoffs, or "fine-tuning," continue—most recently layoffs at a disk-drive operation in San Jose, Calif.
- ▶ A growing population of long-term temporary workers
- ▶ Employees now pay health-care premiums and say there has been reduction in medical benefits
- ▶ A percentage of employees each year are given no pay increases regardless of how well they perform
- ▶ Double time for working Sunday was eliminated

DATA: CWA

claimed through a spokeswoman that most workers do not want a union, that its employees receive competitive salaries. Meanwhile, Gerstner is taking the heat. When the CEO visited Austin this summer, a plane flew overhead dragging a banner: "IBM Stole My Pension." Web sites and chat groups have popped up filled with vitriol against him and its managers. There are even a couple of union songs: "We gave him 10 years of our lives and what have we got to show? Louie and his corporate hacks took off with all our dough." Gerstner doesn't want that tune to catch on, he has to do a better job of convincing his workforce that he really is willing to share the wealth.

By Ira Sager in New York, and Aaron Bernstein in Washington

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DETROIT

MEET YOUR LOCAL GM DEALER: GM

The Big Three are trying new schemes to combat Net invaders

The local car dealer—right there on main street, not out in the auto mall—may seem as quaint as tail fins these days. And, in the age of auto-superstore chains and online car shopping, the local Chevy dealer is feeling mighty pinched. Detroit now sees prices rise more than 25% between the factory and when a car leaves the showroom, thanks to dealer markups and marketing costs. And carmakers would love to find a more efficient way to move the metal. But the Big Three have few alternatives to their dependence on thousands of dealers in big towns and small to get the product to the public.

So, Detroit continues to wrestle with how to streamline its distribution, while keeping dealers healthy at the same time. The latest model was trotted out by General Motors Corp. on Sept. 28. The No. 1 auto maker announced plans for a new subsidiary, General Motors Retail Holdings, that will buy—from willing sellers—up to 10% of its 7,700 franchised dealerships in 130 markets nationwide. GM hopes to reduce distribution costs and enhance customer service. "We feel very strongly that we need to get closer to the retail environment to better understand these changes and their effects on our business," says Darwin E. Clark, GM's vice-president heading the consolidation.

BUYING CLOUT. While GM is looking to get closer, Ford Motor Co. has been scaling back its plan to buy up dealers after finding that integrating once-independent dealerships was harder than expected. And DaimlerChrysler has a different idea altogether: Rather than buying Chrysler or Dodge franchises in the U.S., the carmaker will use its corporate buying clout to help dealers cut overhead on everything from electricity to office supplies—and shave up to \$500 off the average price of a car or truck.

Which one has the correct answer? Who knows? But one thing is clear: Manufacturers are determined not to cede control of distribution to superstores such as AutoNation Inc. or Internet referral and buying sites. Because of state franchise rules, it's impossible for the carmakers to sell di-

rectly. So Detroit needs a formula to streamline dealer networks, cut overhead, and offer competitive prices.

Ford Auto Collection, the consolidation strategy the carmaker developed, ran afoul of tightened franchise laws in major states, such as Texas, which complicated the process of buying out



CHRYSLER CLOUT It's using its buying power to help dealers cut overhead—and sticker price

and combining dealerships. There was also a small rebellion among dealerships that felt Ford had forced them to sell. Ford backed off, and Ross H. Roberts, president of Ford Investment Enterprises, who oversaw the consolidation, chose to retire at 57. But the company insists it's not giving up. "AutoCollection is not running as smoothly as we expected," admits Ford CEO Jacques Nasser. "We've slowed our original ambitious strategy. But we still think it's the right approach." He's quick to add, though: "Independent dealers are going to remain the backbone of auto delivery."

Meanwhile, Ford is moving further

into nontraditional sales. On Sept. 1, Ford invested an undisclosed amount in Microsoft Corp.'s CarPoint, a Web car-buying and information site. Next year, CarPoint will launch a so-called build-to-order service that lets customers to order a car and then track its progress from factory to dealer.

At DaimlerChrysler, the goal is to make its best dealers even better. The company is qualifying for its five-star rating by saving on everything from electric office supplies by taking advantage of group rates the company will negotiate. The concept, which is being tested this fall in 10 Indianapolis dealerships before spreading nationwide, could save dealers \$1 billion, says the com-

pany's new U.S. President James P. Hays. Not surprisingly, dealers favor DaimlerChrysler's approach. "They're still with the ones that brought them to dance," says Gene Beltz, owner of Shadeland Dodge in Indianapolis.

Rather than supporting their franchisees, many dealers feel Ford and Chrysler are putting them out of business. "They've gone from being my mentor, my protector, to my competitor," grumbles Frank Ursomarso, a influential member of GM's dealer advisory committee who owns GM and Ford dealerships in Wilmington, Del. Just what the dealer needs—more competition.

By Joann Muller in Detroit



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EDITED BY MARK FRANKEL

BELL ATLANTIC RINGS UP THE FCC

WILL THE BABY BELLS SOON see their dream of ringing coast to coast come true? On Sept. 29, Bell Atlantic filed a request to the Federal Communications Commission for permission to offer long-distance service in New York state. Bell Atlantic may be the first Bell to get the nod, representing a huge step forward for the 1996 Telecommunications Act. Under the act, the Bells must first prove that they have opened up their local-calling markets to competition before they can offer long-distance service. Bell Atlantic claims it has opened up one million lines in New York to competitors. The FCC has 90 days to con-

sider the request. Meanwhile, the FCC is also expected to approve SBC Communications' merger with Ameritech.

PEACE ON THE NET—FOR NOW

ON SEPT. 28, HERNDON (VA.)-based Network Solutions and the Internet Corp. for Assigned Names & Numbers (ICANN) signed a treaty settling a heated war over a key piece of the Internet. Network Solutions, which holds the monopoly for registering Web addresses with .com, .net, and .org suffixes, agreed to pay \$1.25 million to ICANN, the Net self-regulatory body created to oversee a new competitive market for the business. In return, Network Solutions can operate for another four years the master registry for Web addresses.

GM AND THE UAW SHAKE ON IT

BARGAINERS AT GENERAL Motors were giddy over their new four-year labor agreement with the United Auto Workers. After 19 factory-level strikes in six years, GM and the union agreed on Sept. 28 to a contract that satisfied both sides. GM maintains the flexibility it needs to let its workforce shrink by as much as 24% over the life of the contract, while GM workers get raises of more than 12%, plus adjustments for inflation. The pact also safeguards the job rights and pension benefits of workers at GM's former parts subsidiary, Delphi Automotive Systems. Next up for the union: Ford, where labor relations are strained.

ABBOTT HAS A NEW HEADACHE

ABBOTT LABORATORIES' manufacturing problems are mounting (page 88). On Sept.

THOMAS ROGERS

A WEBMASTER FOR OLD MEDIA

Back to the future? On Sept. 27, NBC Cable President Thomas Rogers was named chairman and CEO of Primedia, the publishing group backed by buy-out firm Kohlberg Kravis Roberts. At NBC, Rogers was known for creating MSNBC and CNBC and pushing the network onto the Web. So what is he doing heading into Old Media at a time when most executives are stampeding to New Media and Internet startups? "I like traditional media assets," Rogers says. "I believe in using their brands to build new assets."



At Primedia, Rogers inherits a diverse roster of publishing titles assembled by departed Chairman William Reilly, ranging from apartment-hunting guides to New York and Seventeen magazines. It's easy to see why KKR Henry Kravis sought out a CEO who could give Primedia little Web magic: Recently its stock was trading barely above its 1995 IPO price. To juice it up, Rogers has to figure out how to extend it online. It may not be next Yahoo!, but the company has nowhere to go but up.

By Richard St.

CLOSING BELL

CURVE IN THE ROAD

When Huffy, a leading U.S. bicycle maker for 65 years, said Sept. 27 that it would stop making bikes domestically, investors momentarily lost their balance and sent its shares down 10.5%, to 8½. The Miamisburg (Ohio) outfit, which has been battered by cheap Chinese bikes and has already moved most of its production offshore, will close its last two U.S. plants and take a \$42 million charge. That was enough to get investors to climb back on: Huffy closed Sept. 29 up slightly, to 9½%.



28, the company said the Food & Drug Administration has found some Abbott diagnostic plants in noncompliance with government rules. The FDA, which halted sales of an Abbott clot-dissolving drug in January over poor manufacturing controls, may try to block sales of some products if the issues aren't resolved. The headaches in Abbott's \$2.8 billion diagnostic business come as Chief Executive Miles White spearheads an effort to turn around the company.

THE SEC CASTS A WIDE NET

NEARLY EVERY CONCEIVABLE scheme to cook the books is on display in the 30 accounting-fraud cases brought by the Securities & Exchange Commission on Sept. 28. Continuing SEC Chairman Arthur Levitt Jr.'s year-old campaign to clean up financial report-

ing, the SEC's net swept 68 officials in 15 companies. Among those charged: former Minnesota Vikings star quarterback Fran Tarkenton paid a \$100,000 fine to SEC charges that, as former of KnowledgeWare, he allegedly helped inflate earnings in 1994 with \$8 million phony software sales. SEC seeks to reclaim \$9 million in stock-trading profits and bonuses from the charged.

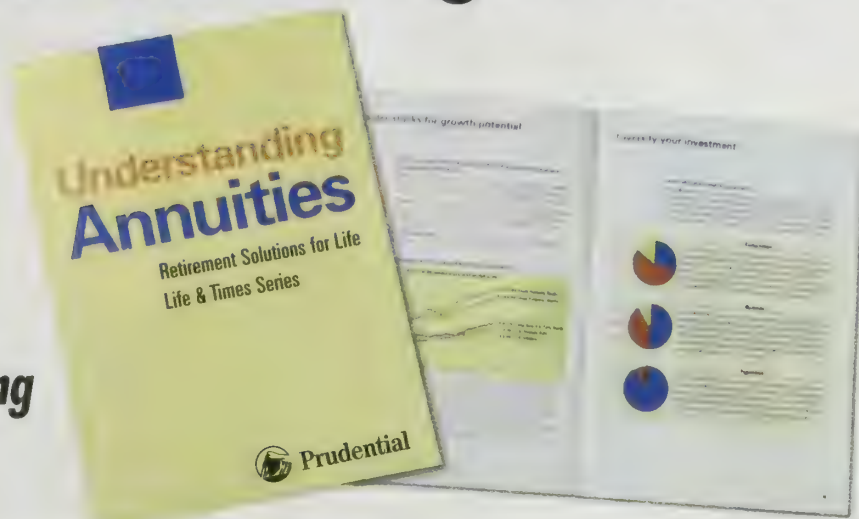
ET CETERA...

- The European Commission approved Exxon's \$76 billion merger with Mobil.
- Excite@Home is scheduled to announce work.com, a site to compete with Netcen.
- Flat-footed: Spain's high court ruled that Nike cannot use its brand name there.
- Avon's shares plunged after it revealed fourth-quarter profits would fall short.

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PAGE 2 What kinds of investors benefit most from an annuity?

Annuities can be a valuable addition to retirement planning at nearly every stage of life. But they may not be for everyone. Find out who may—and who may not—be best-suited.

PAGE 18 What do they mean when they say "guaranteed income for life?"

It might sound too good to be true. The guide explains how this key option of an annuity contract works, and explores other distribution options.

PAGE 20 What are the tax advantages of an annuity?

A tax-deferred annuity may help you keep your tax liability down in ways an IRA or a 401(k) can't. The guide shows you how.

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ED BY DOUGLAS HARBRECHT

THE GOP CONGRESS: A L RANCOR AND NO RUDDER

After the impeachment-wracked 105th Congress, Republican leaders vowed that 1999 would be different. Representative J. Dennis Hastert became Speaker, promising to restore faith in the House. He and Senate Majority Leader Trent Lott pledged to stop attacking President Clinton and to work with the people's business. That included passing budget and spending bills on time, a big tax cut, shoring up Social Security, and rebuilding the armed forces. It was a modest approach, tinged with pragmatism. But it wasn't working.

1999 enters its final quarter, congressional Republicans face the worst of all: another chaotic, end-of-year budget session that has pushed virtually all their priorities to the back burner and rekindled the wrath of voters. A Sept. 1-12 survey by the Pew Research Center found public approval of GOP Hill leaders has slipped to 35%, from 44% a year ago.

MONETARY CAPS. Fiscally, it has been one disaster after another. Republicans bet they could pass a \$792 billion tax cut that was ignored by taxpayers and rejected by Clinton. The use of tight spending caps, GOP lawmakers couldn't pass most of the 13 bills needed to finance the government by the Oct. 1 deadline. That's why Congress had to grant a three-week temporary extension to keep the government running. Even the GOP's case for Social Security "lockbox" bill to safeguard the trust fund's surplus is proving to be a sham. Lawmakers are picking the lock on the trust fund to pay for popular programs. "We've boxed ourselves in," sighs Representative Marge Roukema (R-N.J.).

The outlook: The session could once again end with a failed spending bill larded with goodies for favored lawmakers. But not before a brawl with Clinton over spending priorities and the use of such gimmicks as borrowing from the

2001 budget to mask billions in spending over the caps.

Fearing that they have little to run on in 2000, backbench Republicans are rebelling against their leadership on several fronts. Fifty-four House Republicans approved a bipartisan campaign-finance reform measure, ignoring Majority Whip Tom DeLay's strenuous efforts to derail it. A patients' rights measure that would let patients sue their HMOs has the support of at least two dozen GOP lawmakers despite heated opposition from Hastert. GOP leaders may also be forced to swallow a hike in the minimum wage and new controls on handguns.



HASTERT, LOTT: *Who's in charge?*

DROPPED REINS. The disarray is largely unavoidable. Republicans hold a razor-thin five-vote edge in the House. And their majority in the Senate is five votes short of the 60 needed to limit debate. Hastert is well-liked, but he's widely viewed as a caretaker. And Lott, for all his conservative credentials, can't bring his right flank to heel. "There's no power center" on the Hill, says John J. Pitney, associate professor of government at Claremont McKenna College.

Weak leadership and a lack of strategy have let the Democrats seize the agenda. Many issues at center stage this year, like

gun control, play to Democratic strengths. No wonder Democrats are rebuffing GOP offers of compromise, hoping to run against a do-nothing Congress in 2000.

The last hope for Republican lawmakers is to ride GOP Presidential front-runner George W. Bush's coattails to majority status again next year. But Marshall Wittmann, director of congressional relations at the Heritage Foundation, warns that "there hasn't been much of a coattail effect in Presidential elections since 1980." If GOP leaders don't find a way to govern in earnest soon, they could find themselves coasting—right back into the minority.

By Amy Borrus

CAPITAL WRAPUP

BIOTECH DEAL IN THE WORKS?

For years, bank-reform legislation has stalled on Capitol Hill over a key question: Who will regulate financial services—supermarkets, the Federal Reserve or the Treasury Dept.? But **BUSINESS WEEK** has learned that the powerful agencies are quietly negotiating behind the scenes to remove the biggest stumbling block to a deal. Talks are so quiet that trade groups and legislators had given up on that Fed Chairman Alan Greenspan and Treasury Secretary

Lawrence H. Summers could ever compromise.

Summers favors a House-passed bill that would require banks with assets greater than \$10 billion to report to the Fed. The Senate version would give the Fed far more clout, by requiring that it supervise banks with as little as \$1 billion in assets. A face-saving deal probably lies somewhere in between.

Banking-modernization legislation, which has been in the works for 25 years, has never gotten this far. But even if the Fed and Treasury cut a

deal, other roadblocks remain. Differences persist over how to guarantee privacy protection for consumers. And efforts to water down the Community Reinvestment Act, which requires banks to lend money in low-income areas, also need to be addressed. But most lobbyists agree that those obstacles can be finessed if Greenspan and Summers find common ground. In the past, backers have said a deal seemed imminent, only to be disappointed. With Greenspan and Summers bargaining, this time could be different.

By Laura Cohn

AUTOMOBILES

A NEW ORDER AT NISSAN

A tough boss from backer Renault is shaking up the hidebound carmaker

Nissan Motor Co. and Renault: The most improbable marriage in the auto world. That was the opinion among many car industry executives last spring, when the French auto company acquired almost 37% of beleaguered Nissan and installed a top executive in the Japanese carmaker's boardroom to turn things around. Executives in Detroit, Toyota City, and Stuttgart could barely believe it. Who would want debt-plagued Nissan—especially after DaimlerChrysler looked at a deal and walked away? And how could the French fix this mess?

Come Oct. 18, the auto world will get some answers to these questions. That's when Nissan announces a major restructuring plan. If the plan is as tough as analysts hope, the Nissan-Renault tie-up could turn out to be a winner in the auto-merger sweepstakes, and Nissan's workout will set a new standard for restructuring in Japan. If not, Renault's executives will look like suckers for believing Japanese promises of reform. And Nissan will sputter further back into also-ran status.

SECRET PLAN. The man at the center of this bold experiment is Carlos Ghosn, the former Renault executive vice-president who took the steering wheel of Nissan as its new chief operating officer on June 25. Ghosn stripped costs out of Renault's manufacturing and helped revive the carmaker's fortunes. Already, by working a solid 13 hours a day at Nissan, he has streamlined decision-making and shed assets ranging from



THE U.S. LIKES NISSAN'S XTERRA

stakes in parts suppliers to unprofitable telecommunications subsidiaries. He wants Nissan back in the black by 2001, in contrast to its \$261 million loss last year. "There is one thing that is not ne-

gotiable—that Nissan comes back to profit very quickly," he vows. Meanwhile, Nissan Chairman and Chief Executive Yoshikazu Hanawa is keeping a low profile as Ghosn tears through the company.

Ghosn is keeping mum about his plans, which are expected to cause a huge stir. Analysts say the only way to put Nissan on a sound footing is through reducing head count—perhaps by as many as 11,000—and outright plant closings, even in Japan.

Analysts estimate Nissan's Japan factories are operating at only 60% of capacity. That's bad: Auto makers need to reach 70% to break even. "They have no choice but to close more than one plant in Japan," says Koji Endo, automotive analyst at Schroders Japan Limited. Likely targets include assembly plants in Murayama and Oppauna, the factories of Nissan body assemblers Nissan Shatai Co. and Aichi Machine In-

CARLOS GHOSN ON NISSAN:

“One of the biggest surprises is that Nissan didn't care about its brand. There is nobody really responsible for the strategy of the brand.”

dustry, and Nissan's engine factories, such as Nissan Koki. Nissan needs to cut in half the number of platforms it uses to build cars. All should coordinate search and parts

chasing with Renault.

Many in the industry wonder Ghosn can overcome the institut-



Meiji Restoration, when Western civilization first arrived in Japan," says Ry-
oji Nitta, general manager of domestic
product planning at Nissan. "This is an
entirely new Nissan."

And that's just how their new for-
eign boss wants it. "For a company that
has been losing money for seven years
out of eight, there is not enough of a
sense of urgency. People should be
banging their heads on the walls every-
where," says Ghosn.

Outside Nissan, execs watch with
envy. Ghosn symbolizes not only the po-
tential arrival of major layoffs in Japan
but also the end of stifling seniority sys-
tems, boards where everyone is over
60, and business decisions based more
on relationships than on profitability.
Says the director of the board of a Toy-
ota-affiliated auto-parts supplier: "Maybe
we could use someone like Ghosn."

Of course, Ghosn is inspiring the
troops now because he has not yet an-
nounced the bad news. Nissan's unions
are cooperating, but that could change if

Ghosn wants mas-
sive layoffs. Even
Nissan executives
who admire Ghosn
now may balk at
forcing people out
in the middle of a
recession.

Thus Ghosn's
work is really just
beginning. The
company is widely
believed to be
planning the sale

of its aviation and aerospace division.
The pain will spread to Nissan's vast
archipelago of suppliers. For years, Nis-
san has valued suppliers' loyalty over
their performance.

Ghosn plans to turn
that formula on its
head. He believes Nis-
san can no longer afford
to be crippled by sec-
ond-rate parts makers.
"We need more global
suppliers," says Ghosn.
"Global means compa-
nies that are able to re-
work and supply across
continents."

Analysts expect to
see the same discipline
applied to Nissan deal-
ers. Nissan has already
started to streamline its
dealership networks.

Yet Nissan still doesn't have enough
killer models to support its web of 3,769
showrooms, and many dealers are

hemorrhaging. Some worry Ghosn may
ask them to sell Renault cars in their
showrooms as well. "Selling Renault
cars requires investment in new equip-
ment," says Hiroyuki Ogura, spokesman
for Tokyo Nissan Auto Sales Co. "That
will be difficult for dealers in their cur-
rent condition."

So Nissan needs to roll out exciting
new models as fast as it can. Ghosn
wants to combine Renault's flair for
style with Nissan's excellent engine
technology. "The problem is putting
more attractiveness in our cars," he
says. Nissan needs fewer conservative
sedans like its \$16,600 Bluebird, and
more snazzy models like Renault's
\$16,700 Megane.

Ghosn also wants Nissan to be more
strategic in its launches. The first new
auto out of this embryonic partnership
will probably not emerge for two more
years. It will likely be an entry-level
auto built from a platform shared by
Nissan and Renault. The problem is
that until Nissan launches its own siz-
zling models, rival Toyota Motor Corp.
will continue to gain ground. Toyota al-
ready has a hit in the hot subcompact
category, thanks to its recently launched
\$9,300 Vitz.

NO QUARTER. Nissan has launched some
stars of late. Its new sleek \$35,600
Cedric luxury sedan is selling well in
Japan, and the new \$17,900 Xterra sport
utility has struck a chord with the Gen-
eration X market in North America.
Nevertheless, Nissan is losing share in
both markets. In Europe, Nissan's sales
have skidded by 6.8% compared with
the first eight months of 1998.

And Japanese competitors do not plan
to make room for Nissan on the roads.
"We will not be caught off guard," says
Fujio Cho, president of Toyota Motor
Corp., which recently took direct aim
at Nissan's Cedric when it launched the
sporty \$35,400 Athlete version of its
new Crown luxury sedan.

In this high-stakes game, no wonder
some Nissan managers are nervous
about their futures. Ghosn is forcing
managers to take more responsibility
for their actions by asking them for spe-
cific commitments to sales targets and
prices. So managers wonder if their jobs
are at risk if they don't keep their
promises. It could happen. Says Ghosn:
"People must feel there is nothing guar-
anteed when you don't deliver." True
enough. But it's Ghosn who has to de-
liver most of all.

*By Emily Thornton in Tokyo, with
Larry Armstrong in Los Angeles, Katie
Kerwin in Detroit and Inka Resch in
Paris*

**“The company
is much more
competitor-driven
than customer-
driven. That is go-
ing to change.”**

**“The company
has been in turmoil.
All companies in
turmoil tend to
look at the short-
term. If there is
no clear vision,
there is no
motivation.”**

nce to such mas-
ainful change. He
eem to be light-
fire under his
ers. They're
all-nighters at
fice, fixing prob-
ver 7 a.m. power
asts, and picking up the new lan-
at Nissan—English and French.
is, it's as big an impact as the

BANKING

WHAT A COUP— AND WHAT A RISK

Can a U.S. equity fund turn Japan's LTCB into a moneymaker?

Ripplewood Holdings is scarcely a household name in the U.S.—let alone Japan. Since its 1995 launch by former Lazard Frères & Co. investment banker Timothy C. Collins, the New York buyout specialist and private equity fund with \$430 million under management has stuck to small quarry in the U.S., investing in everything from an English muffin maker to an Atlanta auto dealership and a children's magazine.

Now, Collins has decided to think big—really big. On Sept. 28, he won the exclusive right to bid for busted Long-Term Credit Bank of Japan Ltd., currently owned by the Japanese government, for about \$1.2 billion. If completed, the deal would be the first outright foreign takeover of a Japanese bank and a huge step in Tokyo's plans to drag Japan's banking industry out of the financial dark ages.

But the move is fraught with risk for Ripplewood and a blue-ribbon consortium, including Citigroup, Mellon Bank, Deutsche Bank, and GE Capital. LTCB, with \$90 billion in assets, is a giant locked in a dying franchise of lending to major companies such as Toyota Motor Corp. and Tokyo Electric Power Corp., at razor-thin spreads. The long-term lender has no retail network, has suffered massive staff defections, and had \$47 billion of bad debt when it was nationalized last October.

BIG CATCH. Still, Collins sees potential in its client base and rates LTCB as "a premier asset with excellent business prospects." And he has tapped former Federal Reserve Board Chairman Paul A. Volcker as an adviser and former Citibank Japan Chairman Masamoto Yashiro as chief executive to refashion it into a retail and corporate finance powerhouse, offering everything from credit cards to exotic asset-backed securities. The new LTCB could also become a plat-



TIRED GIANT: Yashiro and Collins (right) must struggle with huge debts, staff defections, and thin margins



form for selling fee-based products such as mutual funds and corporate pension management. "We want to create a financial institution that hasn't existed in Japan," says Yashiro.

But there's a catch: Ripplewood won't be able to boost profits by selling off existing LTCB loans or cutting off troubled borrowers until three years after the takeover is completed, unless Japan suffers a cataclysmic event such as a North Korean missile attack or massive earthquake. Financial Reconstruction Minister Hakuo Yanagisawa and the ruling Liberal Democratic Party considered that issue a deal-breaker. Ripplewood "obviously had to make some concessions to pull this [deal] off," says James

Fiorillo, a Tokyo-based banking adviser for ING Barings Securities Japan Ltd. The trick will be for Yashiro and Collins to generate enough new loans to offset the dead weight of LTCB's yielding loans. That's going to be tough. Just about every other money-center bank in Tokyo is jumping into money funds and pension fund management too. The \$1.2 trillion three-way alliance

between Industrial Bank of Japan, Fuji Bank, and Dai-ichi Kangyo, for example, won't let a foreign-backed LTCB waltz into such lucrative areas without a fight. "We will be very competitive," says Fuji President Yoshiro Yamamoto.

Yet recapitalized, LTCB's stock is not to be any slouch either. Ripplewood's group will pump \$1.14 billion of fresh capital into LTCB, and is negotiating for Tokyo to inject \$2.3 billion more by buying preferred shares in LTCB at a price more than double LTCB's current loss reserves, to about \$4.7 billion. Also, it has a preliminary agreement for the government to take over any existing LTCB loans whose book value drops 20% or more through 2003. Already, LTCB is allowed to count as much as \$2 billion worth of its stock holdings in other companies as capital. With those measures in place, it would have capital equivalent to about 13% of other banks' loans. That's well above the

required under Japanese rules and higher than the average 11.9% of other Japanese banks.

Provided Collins and his backers put such solid foundations in place, they could in time make money—though

they might take the better part of a decade to get through the period that the investors say they plan to hold their stakes. But regulations, as well as profits, are riding on this deal.

Foreign banks have long dreamed of getting a crack at managing Japan's massive \$12 trillion in household savings. With their superior risk-management techniques and fancy computer systems, they believe they can run around the local players. Well, Japan's long-running financial crisis has finally pried the door open. Now it's time to put up or shut up.

By Brian Bremner in Tokyo

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TYPE OF INVESTOR
YOU ARE,
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CHINA

IS THIS ANY WAY TO DRESS UP FOR AN IPO?

Sina.com welcomed Silicon Valley execs. Now they're out

Taiwanese entrepreneur Daniel Chiang used to enjoy boasting that Sina.com, the hot Chinese-language portal he helped create, was different from the other Internet companies in Greater China. While most Chinese entrepreneurs are loath to surrender control of their companies to outsiders, Chiang and Chinese co-founder Wang Zhidong in March installed experienced Silicon Valley professionals in most top executive posts. "You have to play by the U.S. rules of the game," Chiang said in July, explaining why he stepped aside as chief executive officer.

That open attitude enabled Sina to line up \$25 million from foreign investors, including Goldman, Sachs & Co. and Singapore's Economic Development Board. Boasting 1 million registered users, it also became the odds-on favorite to be the leading Internet content provider for the Chinese-speaking world.

But now it appears Sina wasn't as ready for the U.S. high-tech fast lane as Chiang had hoped. Most of its vaunted American execs have left in the past month, victims of a thorough management purge led by Wang and Chiang, sources say. The outcasts include CEO Jim Sha—a veteran of Netscape Communications and Oracle—as well as Sina's chief financial and chief technical officers. Gone from its board are two respected outside directors: Pehong Chen, CEO of Redwood City (Calif.) e-commerce pioneer BroadVision Inc., and Jerry Colonna, founder of venture-capital firm Flatiron Partners and a director for TheStreet.com. Wang and Chiang have even fired investment banker Goldman Sachs, which was preparing to list Sina on Nasdaq or in Hong Kong by yearend. "This is an absolute and utter meltdown of a company," says a banker familiar with Sina. It's unclear whether all the turmoil is affecting operations. But with Net stocks struggling in the U.S., it could hurt efforts to lure new investors.

Behind the rift, sources say, was a

clash in personality and management judgment that shows the difficulty of marrying the business cultures of Silicon Valley and Wall Street with those of China and Taiwan. Sina was formed last year by the merger of Beijing-based software firm Stone Rich Information Technology Service Co., run by Wang, with Sinanet, a portal popular in Taiwan. Sinanet was founded in 1995 and managed by Chiang, 41, a former



GO-GO ENTREPRENEURS

Co-founders Chiang (above) and Wang clashed with their U.S. advisers about strategic decisions

executive of Taiwanese antivirus software firm Trend Micro Inc. But tense relations between Taipei and Beijing meant the merger wouldn't be easy.

NEW HITCH. By putting its headquarters in Silicon Valley, Sina aimed to secure a politically neutral base. It also hoped to attract the talent needed to be a hit with investors. "Both Chiang and Wang were convinced that bringing in professional management would be the best thing, and push them toward an IPO," says Bo Feng, a Shanghai-based banker and early Sina investor. So they hired Sha and other Valley veterans.

But problems arose quickly. The Asian founders and U.S. managers and advisers soon split into opposing factions. "Their visions and ways of doing things weren't the same," says Feng. Chiang and Wang pushed for a focus

on China, where business was growing faster than first expected. The Americans wanted to focus on other markets. Before long, the factions were constantly disagreeing and fighting," a source close to the company.

Another major point of dispute was the timing of Sina's plan to go public. Sources say Wang felt a sense of urgency after China.com Corp., the Hong Kong-based portal that was the first to go public in the U.S., successfully listed on Nasdaq in July. That whetted the appetites of many Asian Internet companies—including Sina. The Americans urged Sina to wait until management had a solid business plan, and detailed financial forecasts were all in place.

The conflict began coming to a head in late August. Sha, 49, was forced out as CEO, and Wang replaced him

Riley Willcox, who had been on Sina for 15 years as a financial adviser for Valley companies, was not so noted. Soon after, sources say, he quit after Wang insisted on his objections on a board meeting. When that board meeting was held on Sept. 11 at the Park (Calif.) offices of Verity Law Group, Sina's counsel proposal prompted Board Vision's Chen and Flatiron's Colonna to quit as directors. Wang had enough control to get the board to approve his plan. Besides, says the banker source, "Wang decided he wanted control of his company back." Chiang and Wang declined to comment for this story, as did Sha and Willcox.

Sina won't say when it plans to go public. One hitch is that it has no CFO: Willcox's replacement, Peter Fagan, quit after a few weeks. Morgan Stanley Dean Witter is the new underwriter, though Goldman remains a Sina investor. "We have the utmost respect for Sina.com and its vision of the Internet," says Goldman spokesman

Peter Rose. Morgan Stanley won't comment.

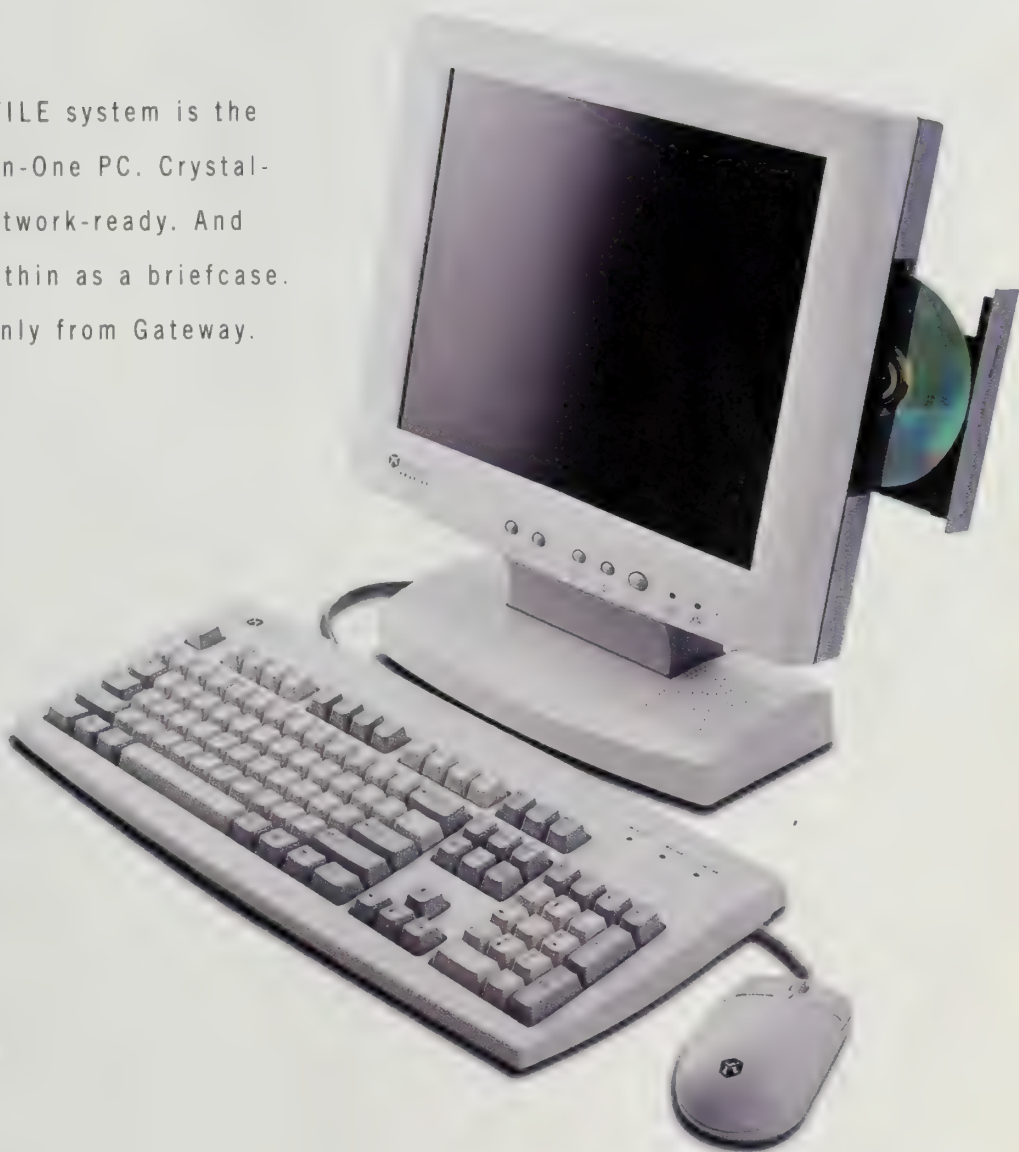
Sina also won't discuss when the company goes next. It presses ahead with an IPO, but ever, investors will want plenty of financial details—and an explanation of what became of its prized U.S. ties. As investors turn more skeptical of Internet plays in general, it's a lesson in corporate cultural management that other Asian companies should study.

By Bruce Einhorn in Hong Kong with Linda Himmelstein in San Francisco



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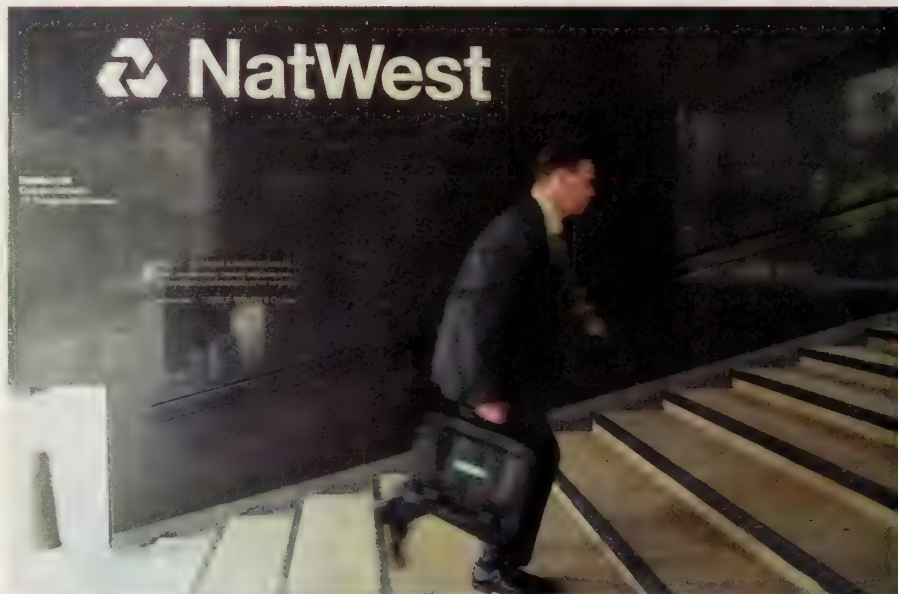


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BRITAIN

A RAID ON THE STAIRS

Bank of Scotland's NatWest bid roils British banking

Rarely in recent memory has an event so excited the City of London as Bank of Scotland's \$35 billion raid on National Westminster PLC on Sept. 24. The unwelcome assault on a major if somewhat tarnished London bank by a Scottish player less than half its size has stoked up hope among investors that the long-awaited shakeout in British banking has at last arrived. With other bids rumored, share prices of banks and insurers from Barclays to Abbey National have turned frothy.

There's a lot here to put the City in a tizzy. It's by far the biggest takeover ever attempted in Britain. And whether it succeeds or not, the Edinburgh-based bank's raid is likely to have sweeping consequences for the sleepy but profitable world of British banking. Everyone knew consolidation made sense. But since the mid-1990s, the pecking order in British banking has been virtually frozen as the four biggest institutions—NatWest, Barclays, HSBC, and Lloyds TSB—warily circled each other without pouncing. Hefty market capitalizations and concerns that regulators would block combinations of the big banks discouraged strategic moves.

Now, credit goes to Bank of Scotland, a smaller, more innovative player,

for trying a new avenue of attack that could crack open the market. Credit goes especially to Peter A. Burt, Bank of Scotland's 55-year-old chairman and a former executive at Hewlett-Packard Co., for stalking big prey. Combining Bank of Scotland's focused management with NatWest's franchise could produce a winner, analysts say.

HUGE THREAT. NatWest is often dismissed as a weak sister compared with its stronger domestic competitors, but it still has 16% of the British retail market and a quarter of the corporate market. It made a return on equity of 19% last year. And NatWest had operating profits of \$3.8 billion for the 12 months ended June 30, 1999. "If Bank of Scotland's team starts to run NatWest, it will be a

the support of Spain's Banco Santo Central Hispano, which owns a stake in Royal Bank. Other potential bidders include British mortgage specialists Abbey National and Halifax. Outsiders, such as Deutsche Bank and even Citigroup, could be tempted for a huge piece of the British market.

NatWest put its own independence into grave jeopardy. The bank, headed by CEO Derek Wanless since 1992, has repeatedly disappointed investors. It has been slow to cut costs and has made huge blunders. Its troubled foray into the U.S. in the late 1980s led to a billion loss in 1996. And its failed move into investment banking resulted in \$1 billion in write-offs in 1997. The straw was the bank's Sept. 3 announcement that it had agreed to buy insurer Legal & General for \$17 billion. Investors thought the price was too high. They pounded NatWest's share price down 19%, exposing it to suitors.

The City finds the Bank of Scotland's bid a welcome change. Peter Burt and his chief executive, 57-year-old Gavin G. Masterton, a welcome contrast to NatWest's brass. Burt and Masterton have juiced up Bank of Scotland's performance. In the fiscal year ended February, it earned \$1.6 billion pre-tax. It helped its bid by reporting pre-tax earnings up 12%, to \$777 million, in the six months ended Aug. 31.

Bank of Scotland plans to dispose of NatWest's noncore assets, including its unprofitable U.S. bond business, Greenwich NatWest Ltd. and its Global Fund management unit. Analysts reckon the disposals could bring \$1 billion. Bank of Scotland would also

THE BRITISH BANK SHUFFLE

THE TARGET National Westminster's overpriced \$17 billion bid for insurer and pension manager Legal & General made it vulnerable to Bank of Scotland's hostile \$35 billion offer.

THE COMPETITION Royal Bank of Scotland, Abbey National, and Halifax are all considering a move on NatWest. Foreign rivals such as Citigroup may be tempted to grab a slice of Britain's profitable banking sector.

THE LIKELY OUTCOME NatWest will probably lose its independence. A bidding battle may trigger more deals. Legal & General is in play, while Barclays, troubled by management turmoil, may also be pulled into the fray.

huge threat to HSBC, Barclays, and Lloyds TSB," says Jonathan Gollins, bank analyst at Donaldson, Lufkin & Jenrette International in London.

But first, Burt has to bag his prey. Bank of Scotland originally considered making its bid in combination with Edinburgh-based Royal Bank of Scotland Group PLC. Now, Royal Bank is contemplating a rival offer that would have

\$500 million in costs per year, largely combining back-office operations.

Investors will now have to decide whether the Scots have the proper credentials to run one of Britain's biggest financial institutions. Bank of Scotland's bid may not be the winning move, but it has certainly changed the game.

By Stanley Reed and Heidi Dardes in London



BURT'S MOVE WON KUDOS

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FRANCE

A TALK WITH FRANCE'S POINT MAN FOR A MARKET ECONOMY

Finance Minister Strauss-Kahn says recovery is on track

Finance Minister Dominique Strauss-Kahn is a champion of France's New Economy. A lone centrist in the leftist coalition of Lionel Jospin, he is the government's point man for creating a more market-friendly France. But he faces major challenges. With government spending at 53% of gross domestic product, the French state sector is still bloated and urgently needs overhauling. Strauss-Kahn, widely considered a potential front-runner for prime minister in 2002, spoke about his goals with Paris Bureau Chief Gail Edmondson and European Regional Editor John Rossant.

Q: The macroeconomic numbers in France are looking good. Can it last?

A: Last fall, the general idea was that the European economy and the French economy would go through a deep slowdown, linked to the Asia crisis. My thinking was that we'd soon be back on track—and that is what has been happening now for the last three months or so. We're on track for 3% growth. Partially, it's the euro. Two to three years ago, a lot of skeptics said we would respond to the slowdown as we did in the 1980's, increase public expenditures while tightening monetary policy. We did the opposite: decreased the public deficit while having a rather lax monetary policy.

Q: How worried are you by the strong dollar and the huge U.S. trade deficit?

A: It's true, Europe has a large trade surplus and the U.S. has a big deficit. In the long run we have to

see a more balanced situation. But this is the price to be paid for the leadership of the U.S. economy in the world. So the U.S. trade deficit might be reduced, but not eliminated. That will only be the case if Europe becomes the dominating economy of the world in the next decade.

Q: German and British policymakers

“This idea of France not moving quickly enough is an outdated, old-fashioned U.S. cliché”

DOMINIQUE STRAUSS-KAHN
French Finance Minister



complain that France is not moving fast enough on structural reforms.

A: This idea of France not moving quickly enough is an outdated, old-fashioned U.S. cliché. The reality is that the French economy is moving and growing much faster than Britain, Germany,

and Italy, and not only last year but this year and more than likely next year. We're moving rapidly to diminish the deficit. From June, 1997, through the end of next year we will have created one million jobs in the private sector, not the public sector. That's five times the rate of job creation in the 1970s, six times that of the 1980s. Unlike the conservatives who were in pow-

er before us, our idea is to use economic growth as a tool to reform the other way around.

Q: But most change seems to have been place in the private sector, while state role remains heavy.

A: The problem is that the state needs to be more efficient, and it is getting more efficient. We had a heavy, state unable to move. But now we are moving quickly now. In 1995 and 1996, the previous government tried to privatize a couple of banks. The unions were in the streets and the government withdrew. Since June of 1997, we have accomplished an enormous amount with the support of the unions.

Q: There have been huge, unprecedented hostile takeover in French finance and industry. How far will that go?

A: Maybe it's unprecedented but this is after all a couple of revolutions, perhaps. The bids for Société Générale, Paribas and the Total-Elf merger illustrate that we are a country where nothing moves for 20 years, and then everything changes in six months.

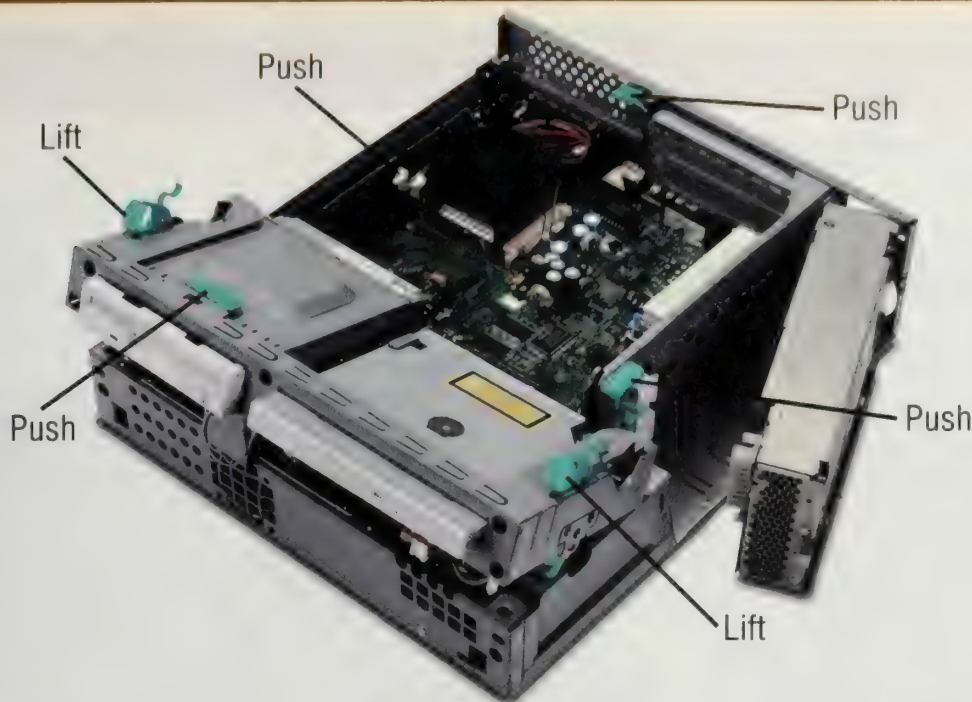
Q: There's a debate about much capital flows around the globe will need regulation. What's your view?

A: Nobody argues that we live in a world driven more by market forces. But if globalization means the extension of

markets, it also means we need new rules. As for the IMF and the role of the private sector, we have to have them on board. When private capital flows are three or four times public flows you can't say you'll solve the economic problems of a country with involving the private sector.

Q: Who is to blame for the economic debacle in Russia?

A: It was a bad idea to think that an economy like the Soviet economy could quickly become a market economy, those who tried to implement that were wrong. But it's easier to say afterwards. You can't change people's behavior overnight. A closed economy, whether an emerging economy or Russia, cannot be dropped in cold water overnight and told to swim. On the other hand, going too fast was an error, to stop reforms now would also be wrong.

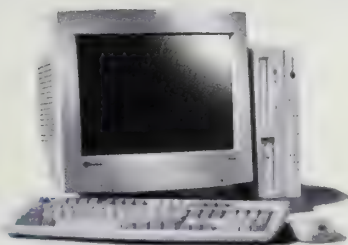


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EDITED BY CHRISTOPHER POWER

HAS BRAZIL MISSED ITS BEST CHANCE FOR REFORM?

Brazil is still suffering from its chaotic devaluation of the real earlier this year, which deepened the country's recession. But to President Fernando Henrique Cardoso, the return of hard times offered one solid opportunity: to use the crisis to cow his opponents into supporting some long-delayed reforms. The conventional wisdom was that the fractious Congress would finally move ahead with the structural reform program Cardoso has advocated since taking office in 1995.

But Brazil may already have missed its best chance to achieve some badly needed change. Cardoso has sent a bill to Congress on social security reform, to be voted on this October. It's a keystone to his program of eliminating lavish handouts and widespread waste. But his opponents are likely to water the bill down badly, if they vote for it at all. A similar fate may well await Cardoso's other reforms.

COMPLACENT. What went wrong? Cardoso may have done too good a job of containing the crisis. After he and his economic team, led by Central Bank President Arminio Fraga and Finance Minister Pedro Malan, stopped investors' panic by aggressively raising interest rates and reassuring investors, Congress became complacent. And members of Brazil's 17 parties began listening once more to special-interest groups ranging from farmers to retirees, who want the social security bill gutted to preserve their state-supported incomes and privileges. Meanwhile, state and city bureaucrats have stepped up their opposition to another Cardoso plan to limit debt-fueled government spending.

Congressional flip-flopping is another problem. About half the members of Congress have switched parties since Cardoso took office. Without party loyalty, the government cannot count on a core of backers and must line up support for

every bill. Now the only way that many lawmakers show up for a vote is if they are assured of pork-largesse from the state. That spending is keeping the budget deficit high and interest rates at 19%.

Cardoso is trying desperately to bring the spotlight of public censure on these legislators. In a recent speech, he accused opposition politicians of "pretending that we're taking away social rights, when we're trying to do away with the privileges of privilege." Cardoso also is trying to quell the opposition in his own Cabinet. In early September, he fired Development

Minister Clovis Carvalho, a close friend. Carvalho said Finance Minister Malan's attitude favoring low inflation over growth was "cowardice." The move reassured Cardoso's commitment to fiscal austerity. But it did little to bring over his opponents in Congress.

Concern about reforms recently reached the real to its weakest level since the depths of the crisis in March. Without reaching reform, the currency will remain weak, interest rates punishingly high, and recovery slow. Yet with his approvals at record lows, the President lacks the popular support needed to pass

toughest measures. And Cardoso may be running out of time. With municipal elections set for October, 2000, he must win until about April, when the campaigns shift into full swing and prevail over Congress.

Cardoso isn't completely helpless against the legislature. His coalition, stung by recent antigovernment protests and the increasingly confident opposition, is beginning to rally. Although Cardoso is more comfortable as a conservative builder than as a campaigner, his uncharacteristic attack on Congress showed a new willingness to confront the legislature. But it may be too little, too late.

By Ian Katz in São Paulo



CARDOSO: Losing support fast

GLOBAL WRAPUP

ITALIAN BROUHAHA

► A political firestorm over last May's \$36 billion hostile takeover of Telecom Italia by upstart Olivetti could imperil further big privatizations by Italy's center-left government. The government tacitly approved the deal, but now Olivetti Chief Executive Roberto Colaninno wants to transfer Telecom Italia's controlling stake in mobile subsidiary TIM to Tecnost, the shell company that was used for the takeover. TIM's rich cash flow could help Olivetti pay down the \$15 billion debt taken

on in the Telecom takeover. But Telecom's minority shareholders are charging that the transfer vastly reduces the value of their holdings. The brouhaha could sour the markets on one of Italy's most ambitious privatizations ever; the upcoming sale of a first 15% tranche in electricity company Enel.

FRENCH DISCLOSURE

► The French government is demanding greater disclosure of executive stock options, following reports that Elf Aquitaine Chief Executive Philippe

Jaffré holds options worth some \$50 million. Politicians, including Finance Minister Dominique Strauss-Kahn, have reacted angrily to the reports about Jaffré, whose company is being taken over by TotalFina. Although actively new to France, use of executive stock options is spreading rapidly with an estimated \$7.2 billion now held by 28,000 executives. Government officials say they don't want to discourage the practice. But Strauss-Kahn says there is an "urgent" need for legislation requiring greater disclosure in order to curb abuses.

ESCAPE FROM EAST TIMOR



The Hotel Turismo is a two-story beachside villa. The floors have been torn off, the windows shattered, and the furniture looted. The water, electricity, and phones are gone. The courtyard is littered with overturned picnic tables, beach umbrellas, dirty toilet paper, and spent rifle shells.

The Turismo was one of the few buildings left standing in mid-September after the Indonesian army and its militias razed most of the capital. So scores of Australian troops moved in on Sept. 20 to lead a U.N. peacekeeping mission in East Timor. The balconies made convenient positions for their 50-caliber machine guns mounted on sandbags and offered a reassuring view of four Australian warships off the coast. The troops slept under mosquito nets in the halls, hastily surrendering the 20 bare rooms to dozens of foreign correspondents. If there was a safe place in Dili, the Turismo was it.

So we thought. Within a couple of hours, it was clear we were trapped in the Turismo, at the mercy of untold thousands of Indonesian army regulars and militias intent on revenge on the international community for backing Timor's Aug. 30 vote for independence. The Turismo had become a symbol of the trap that every U.N. peacekeeping mission falls into: the myth that security, as defined by the

U.N., can overcome total lawlessness.

The myth evaporated two hours after I checked in on Sept. 21. I took a short walk eastward on the beach from the hotel, surveying the thousands of refugees camped on the sand under makeshift tents of blue U.N.-donated plastic sheets. A dozen schoolgirls knelt at the foot of a white statue of the Virgin Mary and prayed for deliverance. Then an elderly couple sitting on a sofa stared at me as if I were a dead man. As I turned back toward the hotel, I found myself facing three men who had been following me all along but to whom I had paid no attention. One carried a hand-sharpened iron bar, another a crude, homemade musket, the third an Indonesian army-issued assault rifle. They did not wear the coy smile that normally greets Westerners in the remote islands of the Indonesian archipelago. An Australian soldier hissed at me and gestured with his rifle that I should stand next to him. I did, and the three men vanished.

Sander Thoenes, a Dutch stringer for the *Financial Times* based in Jakarta, was not so lucky. The next morning at the Turismo, I awoke to the sound of an Australian TV crew talking about a "mutilated white body" in the Dili suburb of

HOTEL HELL

U.N. troops moved into the Turismo on Sept. 20—but that didn't make it safe for journalists

Becora. I checked Thoenes' room. His backpack and laptop lay on the floor, untouched. His last kindness had been to vouch for me when the Australian soldiers admitted me into the hotel. We had traveled to Dili on a charter plane from Jakarta together and shared a ride to the hotel. In the departure lounge at Jakarta's domestic airport that morning, he had snickered about how he had left a reporting job in Moscow to come to Jakarta in September, 1997. "I was tired of covering crisis," he said. "I wanted to cover a fast-growing economy." But two months after his arrival in Jakarta, Thoenes was again covering crisis.

After making sure that I had been admitted to the Turismo, Thoenes took a motorcycle to Becora. There, witnesses say he was shot by six men who wore Indonesian army gear and carried Indonesian army assault rifles.

Thoenes' murder, though appalling, should not have come as a surprise. A few minutes after President B.J. Habibie announced that Indonesia would allow U.N. peacekeepers into East Timor on Sept. 17, his spokeswoman, Dewi Fortuna Anwar, warned the U.N. not to send in "white faces" because they

been secured: the airport, the port, the bombed-out compound, and the still-inhabited Australian consulate. Turismo was not on the list. "The general says he'd be surprised if somebody doesn't take a potshot at this place," a resident of the hotel.

At 6 p.m., an Australian army officer called another living at the Turismo to issue instructions in case of an attack in the middle of the night. "If you hear three short whistles to the restaurant," he said matter-of-factly, referring to the stand-alone room in the center of the yard that the army used to store ammunition. I awoke at 3 a.m. to three panicky shrieks that sounded like they had come from a startled dog. An Australian TV cameraman complained that someone had been having a bad dream. For the next 12 hours, I lay awake as dry leaves and glass shards crumpled and crunched under the paws of a stray cat in the courtyard.

COKE AND COLD CUTS. The morning, 15 of us were at Komodo Airport trying to get out. For hours, we watched helplessly as Australian and American military C-130 Hercules transport planes flew in and out of Darwin, Australia, disgorged tons of crates, and jeeps, and flew out empty. A female Australian army corporal holding a clipboard said she was waiting for clearance from an Australian military air base in Darwin before she could get on one of those planes. She followed the scent of ham sandwiches into the bushes—we had been living on army rations for three days—stumbled across half a dozen Australian Royal Air Force officers gathered in a camouflage tent with coolers brimming with Diet Coke and cold cuts, and bread loaves. I asked for a Coke. An officer with a handlebar moustache ducked inside to fetch me one but begged me to drink inside the tent, "just so your friends don't know where you got it."

A female RAF officer in fashionable black wraparound sunglasses, sitting next to the RAF major asked if the town was worth visiting. "There isn't much of a town left," I replied. They nodded shrewdly, as if they had heard this but didn't believe it. I asked if the airport was secure. They laughed and shook their heads. "We've got the outer perimeter defended," asserted another RAF officer, stretching out on the ground with a Diet Coke. The woman in sunglasses shook her head again. "The next 48 hours are going to be the worst," she said. "The Indonesian army is pulling out 5,000 troops and handing all their weapons over to the militias."

Clearance never came from Darwin. But we scamped aboard a charter flight. "We've dubbed her 'The Dili Diva,'" joked Patrick J. Walker, the British Broadcasting Corp. news producer who had chartered the ancient propeller plane. Two hours later, several of us were on the tarmac at Denpasar Airport in Bali, each \$500 poorer for the charter, but just as glad to be alive.

By Michael Shari in Dili

VICTIM

Witnesses say Dutch reporter Sander Thoenes (right) was shot by six men wearing Indonesian army gear; Thoenes' body (below)



would not be "palatable." The militia's deadly strategy was to keep relief workers from reaching the needy, and scuttle the U.N. mission in East Timor. In practical terms, that meant the militias could run attacks from bases on the Indonesian border of West Timor with the blessings of the Indonesian army.

EDGY SOLDIERS. The terrorism did more than stop U.N. workers: Hundreds of thousands of Timorese who had been forced into the mountains risked death from hunger or malaria while they waited for help.

As the day wore on, the Australians started getting edgy. Soldiers piled us into several white U.N. Toyota Land Cruisers and drove us to the East Timor High Court building for a news briefing, carefully aiming their assault rifles out the windows. We waited 20 minutes in the sun while soldiers checked the building for unwelcome guests. Brigadier Mark Evans, commander of the Australian infantry component in East Timor, proudly announced that four points in Dili had

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BUSINESS



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Every year, 3.5 million people are injured at work. That's where my job starts, making all the calls I can to get patients into the most appropriate doctors, or just helping them find alternate jobs they can perform while in recovery. I worked in a hospital for 27 years, so I know what it's like to need the help of another person. That's why I'll be there, on the other end of the phone, coordinating care, so these people can get their lives back on track. //



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REGULATORS

'INCREDIBLY STRESSED' AT THE FDA

Can it meet new challenges on a 10-year-old budget?

Daniel L. Michels vividly remembers the unsavory discoveries he made when he was a field investigator for the Food & Drug Administration. There was the bakery equipment infested with an ecosystem of bugs, the ceiling plaster falling into cornmeal, the rat-urine trails running through the cocoa beans in a chocolate factory. Now director of enforcement in the FDA's Office of Regulatory Affairs, Michels believes similar things "are probably going on today." But no one knows. The FDA is so financially strapped that it manages to inspect most of the nation's 50,000 food plants about once every 10 years. "We don't have the time to do filth anymore," says Michels.

Filth is one of many areas where today's FDA is a shadow of its former self. One big and visible chunk of the agency—drug approvals—is thriving, thanks in part to fees paid by drug-makers. But FDA officials and outside experts agree much of the rest of the agency is falling on harder times, stretched thin by years of tight budgets. "FDA has become a have and have-not agency," says William K. Hubbard, the agency's policy chief. FDA officials

say many programs have been reduced to a point where they barely exist.

A program that tests foods for pesticide residues now does 7,200 samples a year, down from over 20,000 in 1990. The staff regulating cosmetics has been cut in half since the early 1980s, making

of thousands a year—to inspect a tidal wave of imported foods. And less the agency steps up oversight of dietary supplements, "there will be a disaster someday," warns Dr. Steven Zeisel, chairman of nutrition at the University of North Carolina at Chapel

At the heart of the FDA's woes is simple mathematics. Over the past decade, the agency's budget of \$1.5 billion has barely budged in real dollars. Yet at the same time, Congress has pushed through more than a dozen bills that give the agency expanded responsibilities, such as stronger oversight of medical devices. Meanwhile, the FDA faced an explosion of new and challenging products, from gene therapies to druglike foods. And there are whole new ways of doing business that cry out for consideration, such as self-



IN THE LAB: Drug reviews are up to snuff, thanks to company fees

it impossible to search for possible contamination in plants or assess the long-term hazards of products. Nor is anyone inspecting products such as fancy olive oil to make sure they contain what the labels say. Overall, agency watchers fret the FDA is falling short in everything from analyzing drug injuries and deaths—now numbering in the hundreds

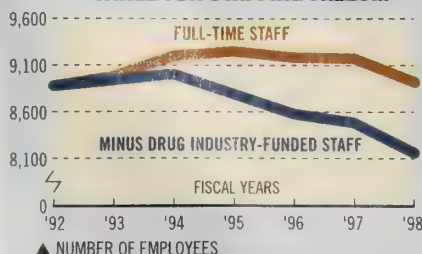
of prescription drugs over the Internet. "We're strangling FDA to death," says Peter Barton Hutt, a Washington attorney and former FDA chief counsel.

Not everyone believes the situation is that dire. Critics in Congress and industry charge that the agency has been too quick to waste scarce dollars. "The [former FDA Commissioner] De-

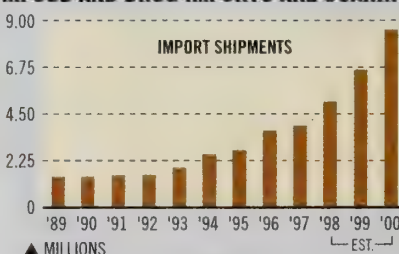
AN AGENCY STRETCHED THIN

The FDA's budget is flat, but the workload keeps growing:

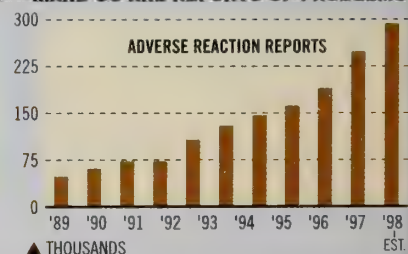
WHILE FDA STAFFING FALLS...



...FOOD AND DRUG IMPORTS ARE SOARING...



...AND SO ARE REPORTS OF PROBLEMS



DATA: FDA



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Science & Technology

Kessler, so many of the agency's resources were directed at the tobacco initiative that everything else suffered," argues CEO John Cordaro of the Council for Responsible Nutrition, a dietary supplement trade group.

Regulated industries also wonder if FDA officials exaggerate the budget woes. Seafood companies, for instance, have complained that inspectors delay valuable shipments of shrimp and other foods to do analyses in the agency's Los Angeles lab. The FDA blames inadequate facilities, but "we feel at times they are just holding up shipments to put pressure on us to go to Congress and get money for the lab," says Richard E. Gutting Jr., executive vice-president of the National Fisheries Institute, a trade group.

Moreover, the agency is too timid when it comes to approving products such as food additives, says Kelly Johnston, a lobbyist for the National Food Processors Assn.: "All the resources in the world won't fix the problem if there's a culture of indecision."

But despite their skepticism, execs know they need a strong FDA. They even push for more resources because the FDA's stamp of approval on products is a crucial ingredient for winning consumer confidence and acceptance—and profits. Procter & Gamble Co. defended Olestra, its controversial fake fat, by pointing out that it had been through an exhaustive FDA review. Now, food-company execs blame Europe's flap over genetically modified crops in part on a failure by EU regulators to command the trust of consumers. Contrast this with the U.S. scene, where such products have caused far less concern. "The standards we set and the safety we ensure helps make business profitable," argues the FDA's Hubbard.

FALLING SHORT. Industry representatives agree. So now that the FDA's capabilities—and possibly its future credibility—may be under threat, some industries are going to bat for the agency. When FDA officials claimed they had to cut \$2.5 million from the office of cosmetics last year, "we went to Congress with an unusual argument for a trade association," says Michael J. Petrina of the Cosmetic, Toiletry, & Fragrance Assn. "We said, 'Please restore funds so the FDA can continue to regulate us.'" They got what they wanted. Similarly, the dietary-supplement indus-

try is now asking the agency to require that companies meet so-called good manufacturing practice (GMP) rules. Dietary supplements facing a host of critics need to be able to say this is a well-regulated industry," says Cordaro.

Still, the FDA's oversight of the seas falls short of what most experts believe is needed. Dietary supplements are a case in point. At the agency's Center for Food Safety & Applied Nutrition, where the staff has shrunk 20% over the past 20 years, "even a program is struggling," says director Joseph A. Levitt. The supplement program is the worst off. A staff of 22 trying to monitor a rapidly growing

billion industry, according to a law, is allowed to sell anything it wants without checking with regulators. Problems do arise. The FDA has to prove products are safe before it can take action—a process that takes far too long. Over the past

years, for instance, the FDA has received hundreds of reports of "adverse" events associated with the supplement ephedra, which is consumed in herbal tea extracts for a variety of ills, including asthma and colds. And there probably have been far more reports of the FDA had a better-funded mechanism for spotting such problems. Yet the agency still has not managed to limit consumers' exposure to the harmful ingredient, ephedrine, which can cause high blood pressure, abnormal heart rhythms, and strokes.

No one predicts massive public health disasters will result from the FDA's current plight. But the trend is worrisome. The FDA isn't as visible a cop or as beat as it should be, says Dennis Baker, associate commissioner for regulatory affairs: "There's always the potential, if we're not out there, that something can go wrong." Overall, the agency has become "incredibly stressed" as people think it ought to be—without potential effect on both consumer health and business," says a top official.

When Congress finally finishes its fiscal 2000 budget, the FDA is likely to get, at best, only a modest increase. But unless lawmakers are a lot more generous, the safety net under the enormous range of products regulated by the FDA will inevitably begin to fray.

By John Carey in Washington

Cosmetics makers had to lobby Congress "so the FDA can continue to regulate us"

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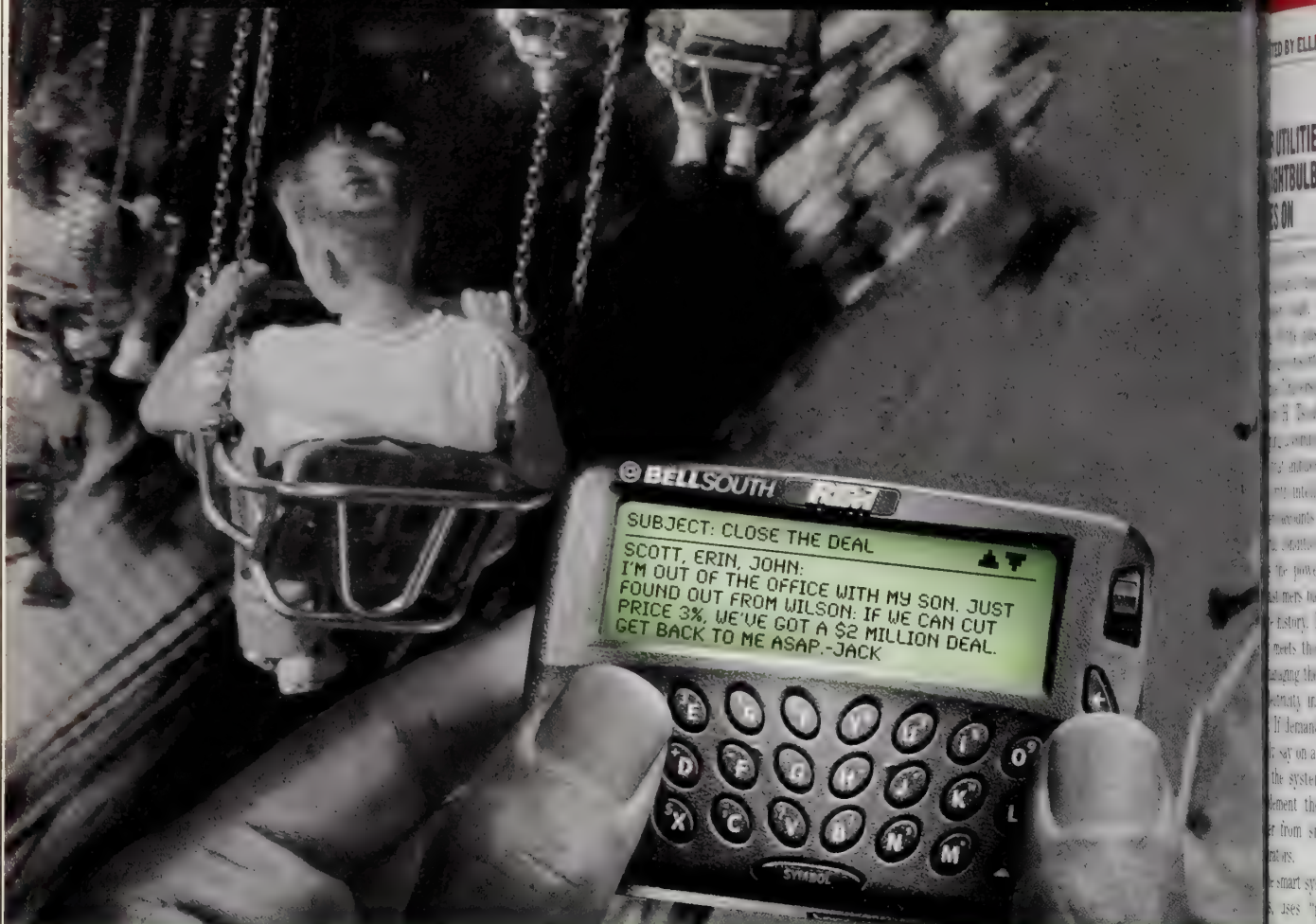
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ED BY ELLEN LICKING

UTILITIES, GHTBULB S ON

BLACKOUTS THAT PLAGUED go and other cities this her could soon be a of the past. An engi- consortium led by ie University professor ri H. Tsoukalas is de- ing a computerized sys- that imbues the power with intelligence. The m accounts for environ- al conditions and pre- the power needs of stomers based on their history. It automati- meets those demands anaging the distribution etricity in the energy If demand outweighs y, say on a hot summer the system knows to ement the grid with r from small backup ators.

e smart system, dubbed e uses "neuro-fuzzy" ology, which combines l networks and fuzzy- gic to make its predic- Neural networks mim- human brain's ability ot emerging trends on past experience, fuzzy logic emulates man tendency to think al terms, not precise ematical formulas. This es Telos to make quick ons without solving ions that specify local ions in minute detail. lay, utility company rs have used tempera- readings and weather ists to estimate ner' energy demands. can be dangerous: Dis- arts of the same service an experience distinctly nt weather conditions. nmonwealth Edison Co. e Tennessee Valley Au- y, both consortium ers, are planning to test by 2001. If it works, consortium will make the ology available to utili- ationwide. *Otis Port*

DNA CHIPS REALLY DO COMPUTE

A TEST TUBE OF DNA MOLECULES CONTAINS MORE potential computing power than all the world's super-computers put together. By using the various segments of DNA as data bits, trillions of molecular chains can be chemically combined, quickly producing all possible answers to a problem that would keep a super-computer crunching away for centuries. However, it's such a pain to find the one correct solution floating somewhere in the test tube that DNA computing has so far been used only to solve trivial problems.

Duke University researchers figure they now have the ticket to unleashing that awesome computing potential: DNA chips. A team led by chemistry professor Michael C. Pirrung has devised techniques to "print" DNA on glass chips. Because the DNA molecules are attached to the glass and not swimming free in solution, finding the answer is a lot easier. In fact, Pirrung believes DNA chips could be used to build DNA computers that automatically spot answers.

The DNA chipmaking technique was developed for applications in genetic engineering. Pirrung's team tailored that process for computer applications. *Otis Port*

IT'S A BIRD! IT'S A PLANE! IT'S A BIRD-SIZE PLANE

FLOCKS OF BIRD-LIKE SPY planes just six inches long could be the next big thing in military reconnaissance. Such tiny planes are usually expensive to build. And they're



easily buffeted by gusts of wind, making them difficult to control.

Inspired by the latest airfoil technology used in windsurfing gear, two University of Florida aerospace engineering professors and their graduate students have replaced conventional rigid wings with flexible latex airfoils, which bear an eerie resemblance to a cloth sail or

the stretchy membranes of a bat's wing. "If there's a gust when you're windsurfing, the sail twists, so you get near-constant lift over a wide wind range," says assistant professor Peter Ifju. In the same way, with tiny rubber-winged planes, "the skin flutters like crazy, and the flutter may actually help to stabilize the plane," he says.

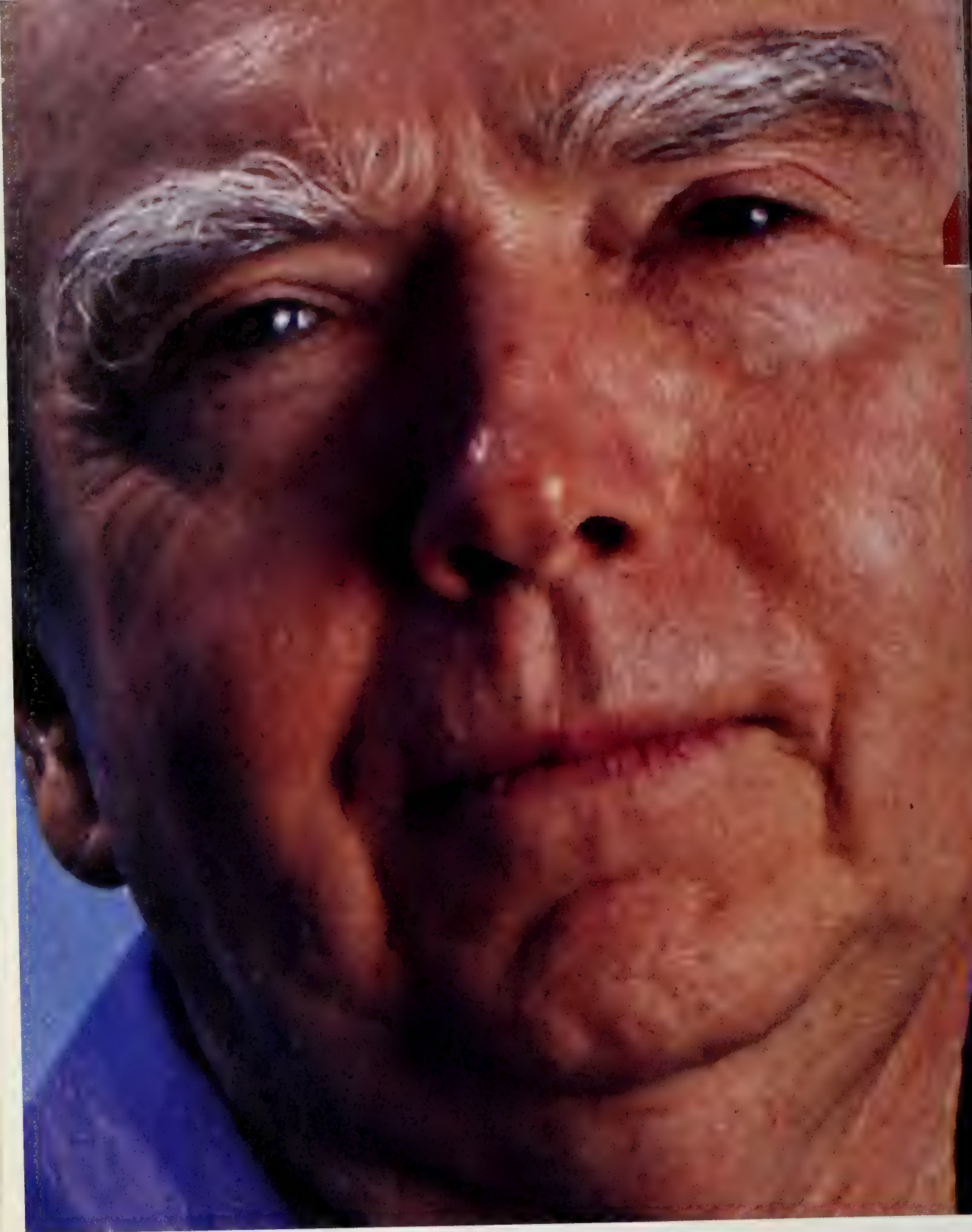
Assembled from about \$250 worth of off-the-shelf motors, propellers, batteries, and radio devices—plus carbon fiber and latex—these planes are much less costly than other rigid-wing models under development at major, government funded laboratories. What's more, they're very durable. The plane that's pictured here has flown 50 flights. That means 50 crash landings, because the craft is not equipped with landing gear. "We haven't busted up a single plane in the last three months," says Ifju. The university is seeking funds for further development and testing. *Neil Gross*



INNOVATIONS

■ When the Danish Poultry Council voluntarily halted the use of antibiotics in its chicken feed last year, farmers feared they would see a decrease in productivity and an increase in disease in their flocks. Instead, eliminating antibiotics cut costs and increased profits by 25¢ per 100 birds. According to DanPo A/S, a subsidiary of Scandinavian Poultry that did the monitoring, no major disease outbreaks occurred. In addition, the chickens weighed just as much as birds raised on antibiotics. That's good news for consumers—eliminating antibiotics reduces the risk of exposure to resistant bacteria that could be carried in poultry.

■ Trimeris Inc., a Durham (N.C.) biotech company, announced on Sept. 27 that its new AIDS drug, T-20, appears to be both safe and effective in early human clinical trials. The results were reported at the Interscience Conference on Antimicrobial Agents & Chemotherapy in San Francisco. T-20 is a member of a new class of anti-HIV drugs that attack the virus before it can infect a host cell. After just 16 weeks on the drug, 60% of the patients showed significantly decreased levels of the HIV virus. In 36% of cases, viral levels were so low they could not be measured with standard laboratory tests. This past July, Trimeris signed an agreement with Hoffmann-La Roche Inc. to begin full-scale clinical testing and development of T-20 in the coming year.



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THE UNITED STATES HAS NOT ACTED IN A MANNER WORTHY OF THE GREAT JUST NATION IT IS — JUDGE LOREN SMITH

With the federal government
 loaded one of the country's
 real estate developers

ANTHONY BIANCO

When his kids were growing up in the 1960s, Gerald C. Barton greeted them almost every evening after school with the same question: "What did you do for your country today?" Paraphrasing President Kennedy's famous challenge was Barton's way of instilling a sense of civic duty in his son and two daughters. Barton also inspired by example. In 1970, at age 38, he left business for a year to work as an unpaid adviser to the governor of Oklahoma, his home state. "Even today, if someone knocked on my door and said, 'I'm from the government,' I'd say, 'Thank God you're here,'" says Barton, now 68. The tenacity of Barton's faith in government surpasses understanding of his closest friends. Over the past decade, legal authorities subjected Barton and his colleagues at Landmark Land Co. to an ordeal of a sort that is not supposed to happen in America. In recent years, Barton's children often have reversed the question that their father put to them so long ago, asking him in so many words, "What did your country do to you today?"

Barton, the founder and chief executive of Landmark Land, had established himself in the 1970s and 1980s as America's leading developer of first-class golf resort communities. La Quinta, PGA West, Carmel Valley Ranch, and Kiawah Island are among the deluxe properties that bear Landmark's distinctive stamp. Says Rees Jones, a leading U.S. golf course architect: "Landmark was probably the best there was at building tournament-caliber golf courses within a reasonable development."

But in 1982, Barton made a fateful misstep, contracting with the U.S. government to acquire an insolvent savings and loan association in New Orleans. For the next seven years, Landmark worked harmoniously with S&L regulators against the backdrop of a mounting financial crisis. But the relationship took a disastrous turn in 1989 with Congress' enactment of harsh reform legislation meant to root out S&L fraud and corruption. In 1992, the government seized Landmark's assets, fired most of its remaining 3,500 employees, and launched an all-encompassing criminal investigation.

EXONERATED. Even before a grand jury was impaneled, S&L regulators fined Barton and three other Landmark directors \$1 million apiece plus \$500,000 each per day. At the same time, the authorities froze not only the Landmark Four's bank accounts but those of their close relatives as well. Barton, whose net worth once had exceeded \$100 million, lost everything but his house, which he mortgaged to pay his legal bills. Barton soldiered on, but David Scott Cone, Landmark's earnest, tightly wound controller, apparently crumpled under the pressure brought to bear by the government. Cone, a 39-year-old father of two teenage girls, blew his head off with a shotgun in November, 1992.

The New Orleans grand jury sat for 18 months—three times the usual term—but never handed down a single indictment against Landmark or any of its senior executives. On Sept. 7, 1999, a U.S. District Court in Louisiana exonerated

THE UNITED STATES



"Barton was unquestionably one of the most significant

Barton and his colleagues by dismissing the last of the civil charges brought against them. Even before this latest victory, Landmark had gained the upper hand in its long legal battle with the government. In late 1997, the U.S. Court of Federal Claims ruled that the government had breached its S&L acquisition contracts with Landmark. A trial is now under way in the same court to fix the amount of damages the U.S. must pay Landmark. The company is seeking \$750 million.

"REAL POUNDING." All Americans are innocent until proven guilty, but few have had their innocence vetted as thoroughly as Barton's. "Jerry Barton was unquestionably one of the most significant victims of the anti-S&L hysteria," says William B. Dockser, chairman of CRI Inc., a real estate investment company that had extensive dealings with Landmark in the 1980s. "He's a seriously honest man who took a real pounding."

Landmark is only one of 125 S&L owners that brought breach-of-contract suits against the government. The Justice Dept. is vigorously contesting almost all of them. "A lot of the

People

damage claims are extremely inflated," says Stuart Schiffer, a deputy assistant attorney general. Even so, by Justice's own rough estimate, resolving these so-called Winstar cases could add \$32 billion to the \$154.5 billion already expended on the S&L bailout. Schiffer would not speak specifically about Landmark.

This bitterly contested litigation also has rekindled the politically explosive issue of how blame for the S&L fiasco should be apportioned. There is a lingering popular perception that the mess was perpetrated by crooked operators who turned S&Ls into their personal piggybanks. The escapades of such S&L high rollers as Charles H. Keating Jr., David Paul, and Don Dixon received lots of press attention. But all the available evidence suggests that fraud was only a minor cause of the thrift debacle. In 1993, a commission appointed by Congress found that fraud accounted for no more than 15% of the cost of the S&L bailout. Most other estimates

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A far more consequential ingredient was the record-setting surge in interest rates that began in the late 1970s and peaked at 21% in 1980. To attract deposits, many S&Ls were forced to offer much higher rates than banks could earn on their mortgage portfolios. By some estimates, fully half of the nation's 4,000 S&Ls were headed inexorably to insolvency by the early 1980s.

But instead of arranging a costly burial, Congress and the Reagan Administration applied the suspect balm of partial deregulation. The government continued to insure deposits even as it freed thrifts to try to earn their way out of lending insolvency by moving into higher-risk sorts of lending and investing. At the same time, regulators relied heavily on counting gimmickry to repackage insolvent thrifts for resale. Most important, buyers could take the difference between purchase price and the market value of a failed institution and count it as capital. In this way, Washington created many billions of dollars of so-called supervisory goodwill.

The government's hastily improvised damage control broke down, giving rise to a monumental wave of ill-conceived investments. In 1989, Congress finally faced up to the magnitude of thrift losses, appropriating \$145 billion through the Financial Institutions Reform, Recovery & Enforcement Act (FIRREA). The bill wiped out supervisory goodwill, rendered many S&Ls instantly insolvent. It also shifted responsibility for policing thrifts to a new agency, the Office of Thrift Supervision (OTS), which was given draconian powers to root out and prosecute S&L crime.

Like the other thrift operators that sued for breach of contract in the mid-1990s, Landmark essentially argued that the deal is a deal, period. The Justice Dept. countered that

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U.S. should be immune from liability for its "sovereign acts" because of its overarching duty to safeguard the national interest. In 1996, the issue reached the U.S. Supreme Court, which ruled 7 to 2 that the government had indeed breached its contracts with Winstar Corp., a Minnesota thrift, and two other S&Ls, paving the way for similar suits. In the majority opinion, Justice David H. Souter wrote that "it

would...have been madness" for S&L purchasers to enter into contracts that the government could break at will.

The action then shifted to the Court of Claims in Washington, where the damage cases of all 125 different plaintiffs were to be individually adjudicated. In late 1997, Chief Judge Loren A. Smith issued his first ruling in the matter, finding in favor of Landmark and three other plaintiffs and lambasting the government for its handling of the case: "The United States has not acted in a manner worthy of the great, just Nation it is. Because the dollars at stake appear to be so large, the government has raised legal and factual arguments that have little or no basis in law, fact, or logic."

Landmark's S&L nightmare offers a particularly revealing look at the FIRREA debacle. When the bill was passed, Landmark's thrift—Oak Tree Savings Bank—ranked among the best-capitalized S&Ls in the country. With \$600 million in equity capital underpinning \$2.5 billion in assets, Oak Tree's 24% capital ratio vastly exceeded the required minimum of 3%—even after its \$150 million in supervisory goodwill was stripped out. Nor did Barton bear any resemblance to the stereotypical self-dealing S&L miscreant. "Most of us who knew Jerry well were shocked by what happened to him," says Representative Sam Farr (D-Calif.). "He is not a bitter man, but he has every right to be."

DISARMING MIXTURE. Barton has spent long hours pondering the essence of golf's appeal but has never played a single hole. His devotion to property development is so complete that he simply has no interest in recreation. "Jerry is a workaholic in every sense of the word," says Bernard G. Ille, a former Landmark director and longtime Barton family friend. "His hobby is his business."

But if Barton is as driven as any Wall Street warrior, his manner is strictly Main Street casual. He stopped wearing a wristwatch years ago and comports himself with a cheerful congeniality that makes it seem as if there is nothing he would rather do than sit and talk to anyone who crosses his path. Barton's conversation is a disarming mixture of plain talk, humor, and erudition, as befits an Oklahoma country boy who studied political history at Oxford University and metaphysics at the University of Chicago.

Born in 1931 in tiny Stroud, Barton grew up in a part of the country devastated by the twin scourges of drought and

the Depression. His parents, R. Lewis and Dollye Barton, made a decent living as school teachers. But many of his neighbors survived only by grasping lifelines extended from Washington. "I grew up a New Deal Democrat," Barton says. "I thought the government was there to help you."

When the school board in Stroud banned married couples from the classroom, the Bartons resigned and went into business, founding Stroud's first movie theater. In 1941, the family moved to Oklahoma City. Barton Theatre Co. bought farms ringing the city and at its peak owned a dozen of the mostly drive-ins.

Jerry caught the entrepreneurial bug early. By 15, he had saved enough money from the popcorn concession he operated at one of the family theaters to buy a house at a busy intersection in the suburbs. He sold the lot to a gas station developer, moved the house to a cheaper lot, rented it out, and used the income to buy another house and so on. By the time he was off to the University of Oklahoma at Norman, he owned several rental properties.

Barton went on to law school at Oklahoma and spent three years in Washington as a law clerk for the Defense Dept., returning



LET'S NOT MAKE A DEAL

Landmark found two buyers for its trophy resorts, but the government rejected both deals. In the end, the properties were sold at auction for much less.

	HON OFFER 1990	DAI-ICHI OFFER 1991 IN MILLIONS	RTC AUCTION SALES PRICE 1994
CARMEL VALLEY	\$52.6	\$46.4	\$17.3
KIAWAH ISLAND	125.5	71.0	66.0
LA QUINTA	72.0	88.0	31.6*
MISSION HILLS	50.3	40.0	35.6
PGA WEST	189.9	226.0	127.0
PALM BEACH POLO	32.5	49.0	18.5**
OAK TREE	***	45.7	23.5
TOTAL PRICE†	\$991.6	\$739.4	\$404.2

*Excludes loans amounting to \$54.2 million **Excludes loans amounting to \$8.1 million
***Hon made no offer †Includes assets not listed above DATA: LANDMARK, RTC

to Oklahoma City in 1958. Over the next dozen years, he methodically built a seven-figure net worth by developing just about anything he could persuade a bank to finance—shopping centers, bowling alleys, even churches or two. In 1971, Barton acquired a bankrupt corporation that owned thousands of acres of land in Louisiana and American Stock Exchange listing. It was through this vehicle, renamed Landmark Land, that Barton discovered his calling in golf resort development.

Landmark's first project, begun in 1973, was Oak Tree, a 1,094-acre residential community in Edmond, Okla. It was a resounding success, largely because the golf course that was its centerpiece was hailed as one of America's 50 best. It was the first of many Landmark courses designed by Pete Dye, a star golf architect nicknamed the "Marquis de Sod" because of the difficulty of his courses. Landmark was especially active in Southern California, where it developed five gated communities. Many Landmark executives, including Barton, moved to California.

Although Landmark quickly won the respect of the investment world, Wall Street was another matter. Its thinly traded stock bumped along at \$1 to \$2 a share for most of the 1970s. But in the early 1980s, Barton's costly investment in real estate began to pay off. The stock soared from 8

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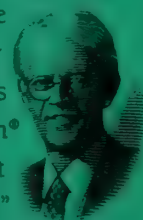
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1982 to a high of 25% in 1986. Barton held 29% of the stock, but many of Landmark's employees also shared in the bonanza through the company's 401(k) plan.

The idea of acquiring an insolvent S&L first occurred to Barton as he pondered the problems of Landmark's homebuilding operations in Louisiana during the recession of 1981-82. If Landmark were to acquire and revive a failed thrift, it not only would be able to spur home sales by providing mortgages but also would gain a relatively cheap source of financing for its resort development projects.

True to form, Barton accentuated the positive. "Dad always takes the optimistic view," says G. Douglas Barton, a longtime Landmark exec himself. "There's no negative in it." In fact, there was a reason that few developers bought



According to his widow, Cone "was just incredulous that anyone would think Landmark would ever do something wrong"

insolvent thrifts: It was highly risky. Converting negative net worth into working capital might bring a dead thrift back to life, but it did nothing to solve the business problems that had killed it in the first place.

In 1982, Landmark acquired Dixie Federal Savings & Loan Assn., Louisiana's largest insolvent thrift. Landmark's assistance agreement with the government gave it 40 years to write off \$101 million in supervisory goodwill. Initially, Landmark's financial exposure was limited to the \$20 million worth of real estate it contributed to Dixie's recapitalization. But in 1983, Barton decided to transfer Landmark's remaining real estate to Dixie and make it his principal property development vehicle.

Barton brought in new S&L executives, who managed to steadily reduce the thrift's operating losses with imaginative solutions to chronic problems. For example, the new Dixie opened its own factory to refurbish the hundreds of mobile homes that the old Dixie had repossessed and left to rust in trailer parks. In 1986, Landmark absorbed a second, smaller insolvent thrift, St. Bernard Federal Savings & Loan Assn. in Chalmette, La. In approving the purchase, the Federal Home Loan Board's regional office in Little Rock, offered a ringing endorsement of Barton and company: "Since Dixie was



AMID THE PRESSURES OF THE PROBE, LANDMARK CONTROLLER CONE KILLED HIMSELF

"We were going to make this a really big business," Barton says. At the same time, he put up sale every piece of property Landmark owned. Japanese investors had bid up the price of U.S. commercial real estate to irresistible and Barton's view, unsustainable levels.

Had Barton been able to implement his strategy he might well be a billionaire today. Landmark

able sell much of its undeveloped acreage at a hefty profit was well into negotiations with several bidders eager to its resorts. But then, in August of 1989, along came FIRREA which invalidated Landmark's basic business strategy by casting a pall over the entire S&L industry.

DOUBLE WHAMMY. The bill gave S&Ls five years to ph out of real estate ownership, but imposed penalties designed to accelerate the process. On June 30, 1990, thrifts had to write off 10% of the value of their property portfolio. mandatory writedown rose to 15% the next year and 20% following year, and so on—even as supervisory goodwill being stripped from S&L balance sheets. This double devastation whammy could send even a healthy institution spiraling into insolvency if it did not swiftly decouple its thrift and estate operations.

FIRREA created two new agencies: the OTS, which regulates solvent thrifts, and the Resolution Trust Corp. (RTC), which took over insolvent ones. Acting on the premise that regulatory laxity had exacerbated the thrift industry's financial woes, Congress granted the OTS extraordinary enforcement powers. The political pressure brought to bear on the OTS' strict office in Dallas was especially intense. No other part of the country had been afflicted by as many thrift failures had the five states under its jurisdiction: Texas, Louisiana, Oklahoma, New Mexico, and Mississippi.

To run the Dallas office, the OTS brought in Billy C. Wood, a native Texan of taciturn demeanor and authoritarian bent. Gregory V. Goggans, the OTS resident examiner for Oak Tree Savings, referred to Wood, his boss, as "The Big Kahuna." In his court testimony for the Landmark case, "If Billy Wood said it, that's the way it was going to be..." Goggans testified

People

acquired...the association has been turned around and is considered to be one of the better operated associations in this district."

As Barton had envisioned, S&L ownership enabled Landmark to finance its real estate projects at three-fourths of a percentage point below market rates. It is hard to say whether Landmark's savings exceeded the modest operating losses sustained by Dixie and St. Bernard's, which were merged and renamed Oak Tree Savings. But Landmark was able to post a net profit every year except 1987 while the value of its real estate holdings soared—to nearly \$1.9 billion by mid-1989, according to Deloitte & Touche.

Even so, in 1988, Barton boldly set out to reinvent Landmark. He created a new subsidiary, Oak Tree Capital, to manage insolvent S&Ls under contract to the government and to acquire thrift-tainted real estate for its own account.

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fied. "Anybody that crossed Billy Wood in the Dallas office wasn't around much longer."

Suddenly Barton's very style of doing business was a provocation. Steeped in the nuances of real estate finance and taxation, he often crafted the sort of complex transactions that

tended to arouse the suspicions of regulators. What is more, he was so confident of his own judgment that he often did not

bother to bring in outside appraisers to value Landmark's properties. While the FHLB was generally willing to give Barton the benefit of the doubt, the OTS was not. They required documentation—and lots of it.

On Sept. 8, 1989, one month after FIRREA was enacted, Goggans completed a six-month examination of Oak Tree. Goggans recommended that the S&L be forced to write off \$77 million of its \$178 million in loans to CRI, its largest borrower, even though the company had not missed a single loan payment. The problem, as the examiner saw it, was that the La Quinta Hotel in Palm Springs and the other properties securing the loans were worth only \$101 million. Barton disagreed vehemently and made use of every form of recourse open to him, including belatedly hiring independent appraisers. Although the outside experts generally sided with Barton, the OTS forced Landmark to rescind a \$32 million profit it booked on one sale to CRI and set up \$63 million in loan loss reserves. Wood and Goggans both declined to be interviewed, citing a Justice Dept. request made of all its witnesses in the Landmark case.

While the La Quinta and other accounting disputes played out, Barton was trying with increasing desperation to extricate his real estate business

thrifths had encountered selling into a glutted pro market by issuing a ruling allowing exactly this transaction.

The phrasing of Twomey's letter seemed to leave open the possibility that Hon could gain OTS approval by rephrasing his offer. Hon was eager to try, but later complained that Twomey and the OTS "stonewalled" him. "They wouldn't talk with us on the phone, they wouldn't write us a letter, they wouldn't do anything," Hon testified in a deposition. Says Twomey: "I am not in a position to comment."

Immediately after the Hon deal collapsed, the Bass Group reapproached Landmark, offering about \$900 million for

People



FORMER OTS HEAD RYAN DENIES HIS OFFICE'S DELAYS KILLED A

In 1989, Congress created a new watchdog, the Office of Thrift Supervision, and gave it draconian powers to police S&Ls

from his S&L without destroying either. Two leading contenders emerged: Robert M. Bass, a Texas oil billionaire who had acquired a large California thrift in insolvency, and Barry G. Hon, a wealthy Orange County homebuilder. Each hankered for the same basic assets, Landmark's prime resorts in California and other states (table, page 78).

"UNSAFE, UNSOUND." Hon outbid the Bass Group, offering \$992 million for 19 golf courses, four hotels, and thousands of acres of undeveloped land. Barton told Landmark's directors that the company could generate another \$200 million to \$300 million if regulators were willing to give him time to sell the assets individually. Still, the Hon sale would enable Oak Tree to book a \$470 million profit, which would go a long way toward ensuring the thrift's ability to continue meeting FIRREA's stringent capital requirements.

On Apr. 10, Barton flew to Dallas and hand-delivered to Neil J. Twomey, the OTS caseload manager for Oak Tree, a signed purchase agreement. Assuming the sale as good as done, Barton flew back to Dallas on May 4 to tell Twomey of his plans to sell the remaining half of Landmark's real estate. Twomey handed Barton a letter rejecting the deal as "unsafe and unsound... as currently proposed"—mainly because Hon planned to finance its purchase with a \$770 million loan from Oak Tree. The decision was especially puzzling since the OTS had just acknowledged the difficulties most

same package of properties. Put off by what he saw as a low-ball bid, Barton hired Salomon Brothers to organize a global solicitation. The investment bank gathered 25 offers for all or part of Landmark's resort holdings. On July 18, a group of Salomon bankers spent several hours briefing Wood, Twomey, and other OTS officials on the negotiations.

Five days later, Twomey scandalized Landmark executives—as well as some of his colleagues—by resigning the OTS to take a job in California with an S&L owned by the Bass Group. Landmark alleged in its suit against the government that Twomey had supplied confidential information to the Bass Group. Worse, Landmark charged, Twomey blocked its sale to Hon because he "was seeking to prevent Landmark to sell the real estate to his soon-to-be-employer, the Bass Group." Says a spokesperson for the Bass Group: "The allegations are false, and the facts in the matter speak for themselves." Twomey vehemently denied any wrongdoing when questioned by government investigators. The report of the Inspector General found no evidence of wrongdoing by Twomey. "However," the OIG's report states, "the investigation did result in finding that an obvious perception was that Mr. Twomey's actions were improper."

The Hon offer may have been Landmark's best chance, but it was not its last one. The high bidder in the Salomon auction was Daiichi Real Estate, which offered \$847 million for

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same properties for which Hon had bid \$992 million. However, the Japanese giant offered more cash—\$303 million to \$220 million. The parties reached an agreement in late 1990 and nervously awaited the OTS's verdict.

Billy Wood expressed no opinion about the transaction but stipulated the deal close by Mar. 31, 1991. This was a demanding schedule for so large a transaction, but it suited Barton's purposes. By this time, the U.S. economy was stumbling into a brief but severe recession, crimping Landmark's operations across the board and leaving it in violation of the S&L capital requirements set by FIRREA. The combination of operating losses and OTS-mandated writedowns would produce a horrendous loss of \$221 million for 1990.

The OTS had required all of 24 days to categorically reject the Hon deal. But now, with Landmark's survival hanging ever more precariously in the balance, the OTS set about evaluating the Daiichi offer in painstaking fashion, even hiring a Wall Street investment banking adviser, Kidder Peabody & Co. Landmark and Daiichi met Wood's deadlines, Kidder took a favorable opinion of the sale, and yet the OTS never did rule. In September, 1991, Daiichi withdrew its bid.

In its lawsuit, Landmark alleged that the government had

BASS (BELOW) WAS OUTBID BY HON FOR THE LANDMARK PROPERTIES, BUT THE OTS REJECTED HON'S OFFER

"slowed down the Daiichi transaction in every way possible" and that "after months of consideration, the government made unreasonable and unnecessary demands on Daiichi, killing the deal." OTS Director Timothy Ryan told reporters at the time that Daiichi had failed to disclose the names of Japanese investors who were joining it in the purchase. "This fell apart because of internal decisions in Japan," Ryan said.

On Sept. 29, 1991, the attention of the golf world was riveted on Landmark's newest creation, the Ocean Course on Kiawah Island, S.C. It was not until the German Bernhard Langer missed a putt on the 18th green that the U.S. was assured victory in one of the greatest Ryder Cup matches in history. Memorialized as "The War at the Shore," the Ryder Cup brought the Ocean Course recognition as one of the world's great new golf courses.

Landmark had acquired the island site in early 1989 and promptly persuaded the PGA of America to switch the Ryder Cup from its PGA West course in California to what was then nothing but a sand dune. Even as it was scrambling to sell its resorts before the OTS seized them, Landmark also was racing to complete the Ocean Course for the Ryder Cup.

Barton's enjoyment of the Ocean Course's triumphant debut was undercut by the likelihood that the OTS soon would seize Oak Tree Savings. The S&L was insolvent, but the resorts were still humming along. Based on his dealings with the OTS, Barton feared that the government would be unable or unwilling to preserve the value of the resorts and safeguard the interests of their residents and club members.

On Oct. 10, Barton seized the legal initiative by instructing Landmark's lawyers to seek Chapter 11 protection for Oak Tree's real estate subsidiaries. According to an OTS

spokesman, this was the first and only time a thrift used federal bankruptcy code to forestall OTS action. Despite novelty of the move, a federal bankruptcy court in S. Carolina immediately issued a restraining order, as Barton had hoped.

The OTS and RTC seized Oak Tree's thrift operations also lowered the boom on Barton and three other directors. The government fined each of them \$500,000 a day every time the Chapter 11 filing was in effect and froze their bank accounts and those of their immediate relatives as well. Under FIRREA, the OTS could impose such penalties without a hearing or offering any evidence of wrongdoing. Not long afterward, the U.S. Attorney in New Orleans opened a grand investigation into allegations of mismanagement and self-enrichment against Barton and other Landmark executives.

Chapter 11 has long been a legally sanctioned haven for troubled companies to keep their creditors at bay while reorganizing. However, in bringing suit in federal court to overturn Landmark's bankruptcy protection, the OTS



**The government
fined Barton
\$500,000 a day**

**and froze not only his accounts but
those of his immediate relatives**

argued that its Chapter 11 filing was illegal because it violated an agreement Barton had signed in early 1991, promising to seek the agency's approval for any "material transaction." What is more, prosecutors reportedly tried to persuade a grand jury that Landmark's bankruptcy filing was the product of a longstanding conspiracy to defraud the U.S. government. The U.S. Attorney's office in New Orleans declined to comment.

FALSE REPORTS? Scott Cone, Landmark's controller, made himself a prime target merely by signing the Chapter 11 papers. But according to his widow, Cone also was spoiling for a fight. "He was just incredulous that anyone would think Landmark would ever do something wrong," says his widow, Debbie Cone Kreller. In April, 1992, the OTS brought an administrative action against Cone, accusing him and one of his subordinates of perpetrating a "massive deception" by filing false reports with the agency. Cone and his colleague denied the charges.

In August, 1992, a federal appeals court stripped Landmark of its Chapter 11 protection. The court did not address the charges the OTS had levied against Barton and his colleagues but did find that FIRREA gave regulators powers that overrode the federal bankruptcy code: "The RTC cannot be considered just another creditor of a company in bankruptcy." The RTC soon seized all Landmark's properties.

Up to this point, Landmark had been allowed to pay for Cone's legal bills. But now the controller was on his own, broke and unemployed. On Oct. 30, Cone settled with the OTS, admitting no wrongdoing but consenting never again to work for a bank or thrift. According to Landmark sources, officials continued to try to pressure Cone into providing evidence



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against Barton by refusing to give written assurance that it would not sue him to pay their attorney's fees in the matter.

Cone killed himself the day before Thanksgiving. His widow was taken directly from her husband's funeral to the sheriff's office in Covington, La. There, according to Kreller, FBI agents pressured her into letting them search her house, even implying that Barton had had her husband murdered. She refused. Over the next few weeks, government agents showed up several times at her house, demanding to search the premises, she says. Since no warrant was ever produced, Kreller would not let them in.

AUCTIONED OFF. Finally, she was frightened into cooperating by a telephone call from Patrice Harris Sullivan, an assistant U.S. attorney in New Orleans. According to Kreller, Sullivan implied that she and her daughters might be in danger. Not sure what that danger might be, Kreller accepted Harris' offer of protection. A pair of FBI agents immediately drove Kreller to New Orleans. "They were very nice but kept asking me questions like, Did I know Jerry Barton? Had I ever been to a party at his house?" She carried with her a box of her husband's papers. She turned the box over to a judge and took a bus home.

People

Kreller never was called before the grand jury. Sullivan did not respond to requests for comment. An FBI spokesman said the bureau would have no comment on the matter, because Landmark's case against the government is still pending.

If not for FIRREA, Oak Tree Savings might well have survived the recession of 1991, as Landmark subsidized its losses from the vast storehouse of real estate value it had built over 20 years. It is also possible that Oak Tree might have survived FIRREA had regulators approved either the Hon or Daiichi deals. At a minimum, these transactions would have cut Oak Tree's losses.

As it was, though, Oak Tree Savings was liquidated by the government at a gross cost of about \$1.4 billion, ranking it tenth on the list of costliest S&L bailouts. In 1993, the RTC auctioned off Landmark's prime resorts for \$404 million, or



BARTON'S NEW COMPANY HAS COMPLETED RESORTS IN TEXAS AND MISSISSIPPI

A proposed golf course in Ireland may be Barton's crowning achievement

about 55% of book value. Not after the sale, the OTS amended administrative charges against Barton and his three fellow directors. The agency dropped its allegations of enrichment and reduced the associated fines, to \$16.7 million in Barton's case. The OTS action is pending but has been dormant since 1994 and is unlikely to be revived.

Even the head of the OTS apparently had second thoughts about FIRREA, at least in terms of its

impact on the 350 thrifts that owned real estate development companies at the time the bill was enacted. "For many of these institutions, these assets are not that bad. In some of them are very good," Ryan said in testimony before Congress in March, 1992.

For his part, Barton seems to be well on his way to restoring his reputation as a preeminent golf developer. His new company, Landmark National, has completed one resort in Texas and another in Mississippi. Among the half-dozen other projects under development is a Greg Norman-designed course, a spectacular strip of sand dune near the rustic village of Inishbeg in County Clare, Ireland. Barton sees the project as potentially the crowning achievement of his career.

Barton insists that he is thinking more about the future than the past, but acknowledges that he is not without regrets. Like many former Landmark executives, he will not talk for long about Scott Cone without getting emotional. And the destruction of the company he spent much of his life building still rankles. But even if the current trial ends with only a modest damage award, Barton says he will be satisfied that justice was done. "There is no way for a government to confront its mistakes very easily. But in the end, the system did work," he says. "There was recourse, and you would have had that in every country."

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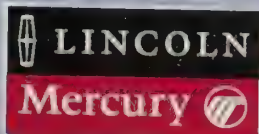
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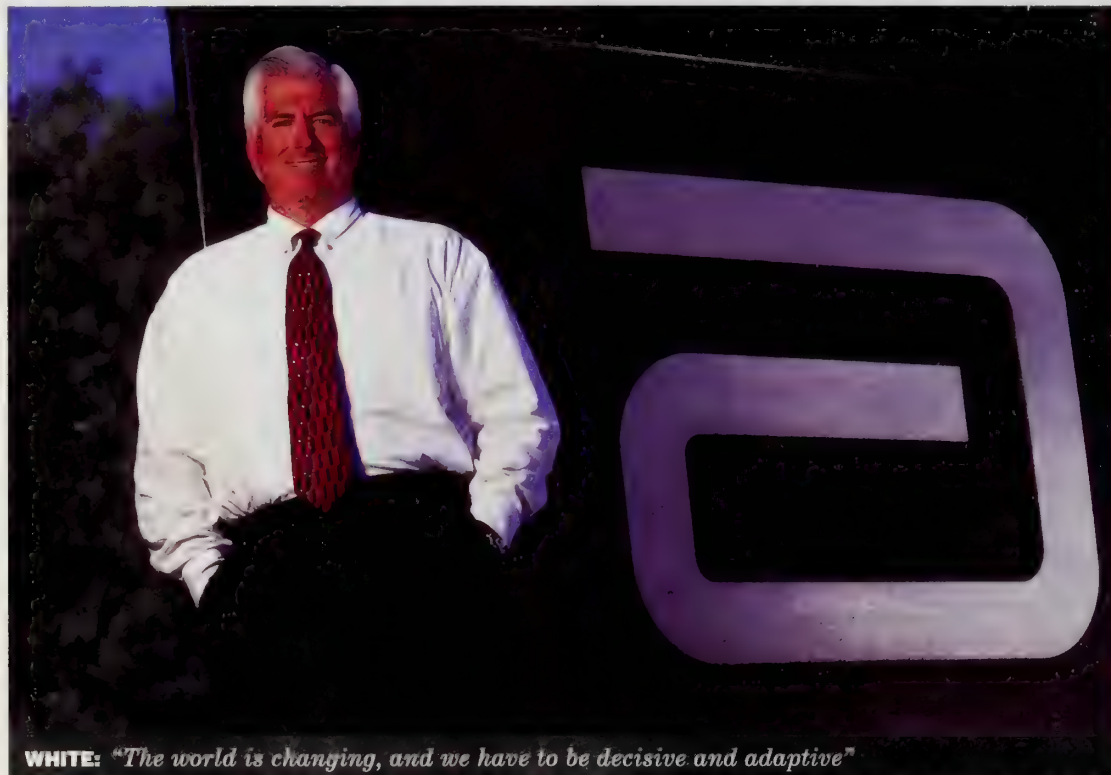
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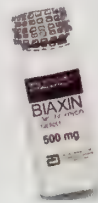
Does Abbott Labs' new chief have the right remedy to put growth back on track?



The meeting wasn't exactly what Miles D. White expected. Last fall, White and two other internal candidates for the top job at Abbott Laboratories spent a day at a New York hotel making presentations to the board on how they would lead the \$12.5 billion health-care company. While White, now 44, had drawn up an extensive blueprint to revive Abbott's sluggish growth, the directors were more interested in seeing how he stood up under pressure. "The board immediately tried to knock him off his feet, and he reacted very well," recalls David A. Jones, chairman of Humana Inc., who headed the committee handling Abbott's succession.

The good news: White's confident instincts won the board over, and in January he succeeded longtime Abbott chief Duane L. Burnham. The bad news: He will need that confidence to tackle the daunting challenges. Although Abbott has long churned out predictable, decent earnings gains, that reliability had

a price. While other drugmakers bet heavily on new blockbuster drugs that created years of heady growth, Abbott's plodding ways left it with a sparse pipeline, slowing growth, and subpar stock. White's prescription: a dramatic ramp-up in research spending and a flurry of dealmaking. Indeed, in June, he struck Abbott's biggest acquisition ever—its \$7.3 billion purchase of drug-delivery specialist Alza Corp. Says White: "The world is changing, and we have to be decisive and adaptive."



White's Rx:
A dramatic
ramp-up in research
spending and a flurry
of dealmaking

Certainly, would argue that. Last year, Abbott's sales increased only 5%, while earnings grew 11.4%, below the 16.5% annual growth it averaged in the late 1980s. This year, PaineWebber Inc. analyst David J. Lothson figures Abbott's net income will climb just 10.3% to \$2.6 billion, on \$8 billion in sales.

Yet while White's dealmaking should help, many on Wall Street worry that it is overpaying for acquisitions. And skepticism about any imminent rebound is rife. Since White took over in January, Abbott's stock price has dropped 18%, while the Standard & P

Health Care Composite index is down around 10%. "This takes time, and there is some [earnings] dilution associated with these fixes," says Merrill Lynch & Co. analyst Daniel T. Lemaitre, speaking of White's overhaul.

ABOVE THE FRAY. The biggest headaches have been in the company's billion drug operation. It's the largest business at Abbott, whose other units produce diagnostic equipment for medical labs, hospital products such as anesthesia, and nutrition items like the infant formula Similac. Pharmaceuticals also generate well over 50% of operating income, according to analysts.

But a weak new-product pipeline caused growth in drug sales to plummet—from 15% in 1997 to just 5% year. While rivals have spent the aggressively striking acquisition or marketing deals, Abbott mostly stayed out of the fray. "We tended to find reasons why deals didn't make sense rather than looking at their strategic value," says Arthur J. Higgins, head of ph

A full-page photograph of Cindy Margolis, a blonde woman with long hair, wearing a shiny, metallic silver strapless dress. She is standing with her hands on her hips, looking directly at the camera. The background is a blue wall with a pattern of large, raised, circular indentations, resembling a giant bubble or a stylized globe.

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maceutical operations. Worse, Abbott will invest just \$550 million on drug research last year. That's about 13% of pharmaceutical sales—well below the 17%-plus rate such market leaders as Pfizer Inc. plow in.

But the bigger problem has been Abbott's undisciplined approach to research. Abbott spent millions, for example, to develop and roll out an asthma drug called Zyflo, even after company tests indicated that the large doses needed could cause liver problems in some patients. Moreover, the drug development team didn't focus on the product improvements needed to keep ahead of rivals. Abbott didn't move quickly enough in the early 1990s to develop a once-a-day or an intravenous version of its \$1.2 billion antibiotic Biaxin for the U.S. market. Since rival Pfizer's Zithromax has those versions, Biaxin's U.S. sales have slipped.

The company has taken some other big hits as well. In August, Geneva Pharmaceuticals Inc. brought out a generic rival to Abbott's \$690 million drug Hytrin for hypertension and noncancerous enlarged prostate. That is likely to cut Hytrin sales to \$500 million next year. And early this year, the Food & Drug Administration halted sales of Abbott's \$275 million clot-dissolving agent Abbokinase because of poor manufacturing controls. "You've got three blockbusters in your portfolio that aren't doing what they've done historically," says John R. Schroer, portfolio manager at Invesco Funds Group Inc., which is a large Abbott shareholder. "And there's nothing immediately to fill in for them."

VITALITY SHOT. If anyone within Abbott can nurse the company back to health, however, White looks to be the one. A snowboarding fan who swigs Diet Cherry Pepsi, White brings vitality and informality to the staid company. A former McKinsey & Co. consultant, White joined Abbott's diagnostic division—which makes testing equipment

for labs, hospitals, and doctors—in 1995. A decade later, when White took the helm, revenues were growing at less than 4% a year. He pushed into new markets, including a move into glucose monitoring, with the \$867 million acquisition of MediSense Inc. in 1997. And he pumped more money into developing new products. His formula paid off. In 1998, diagnostic sales grew 15%, excluding the impact of currency, more than twice the industry growth. "Miles

consistently delivered results," says David C. Carey, vice chairman of executive search firm Spencer Stuart U.S.

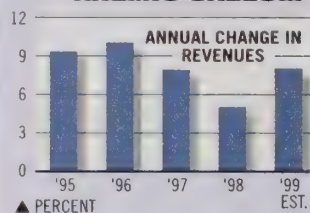
Now, White is playing that aggressive medicine to the rest of Abbott. In addition to Alza, he will pay \$100 million for Perceptics Inc., a maker of devices used to seal arteries after major vascular surgery. dealmaking has come cheap, however. The Alza deal, in particular, will shave off next year's earnings per share. While Alza will make some much-needed new products, and Michael Krensavag, Brown Brothers Harriman warns that it does little to improve Abbott's ability to develop new drugs, Alza's strength in creating new ways to deliver existing drugs

To repair the product machine, White will nearly

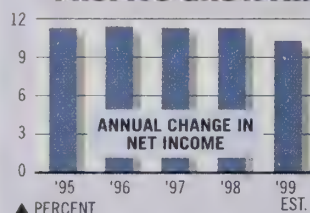
double the research and development spending for pharmaceuticals, to \$1.1 billion, in the next three years. Just as important, White is bringing more discipline to research. The company is paying more attention to follow-through on products, for example. And new tests, which include executives involved in research, marketing, and manufacturing have been set up to give input on drugs at early stages of development.

Still, those moves will simply help Abbott even with its far more successful rivals. And some industry pros say the company's small size puts it at a competitive disadvantage as the costs of drug

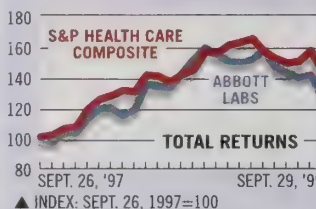
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velopment soar. Stephen S. Tang, a senior director of the health-care strategy practice at A.T. Kearney Inc., says smaller players such as Abbott need to concentrate on a limited number of categories. While Abbott has pulled out of two fields—immunology and cardiovascular research—it still competes in other areas. “They’d be better off focusing on the few where they are leaders,” says Tang.

Moreover, White has challenges beyond the drug operation. The company is saddled with an underperforming \$1 billion U.S. business in nutritional and pediatric products. Last year, sales declined slightly, as pricing pressure continued to hit infant formula. To drive growth, White wants to push further into higher-margin lines related to pediatric health.

Small fry like Abbott should focus “on the few [are] where they can be leaders,” says one expert.

gin lines related to pediatric health. Abbott is also expanding Abbott's line of nutraceutical products, such as the En-Glucerna snack bar for diabetics. Reasonable moves all, but are they worth it? Plenty on Wall Street agree. PaineWebber's Lothson in arguing White should dump the slow-growth unit and concentrate on restoring Abbott's core.

But for now, White says Abbott has no need to slim down. Instead, he's concentrating on cultural changes that he hopes will spur better cooperation among Abbott's units. For starters, there are little things such as volleyball and soccer fields under construction at company headquarters. But more critical changes are under way as well. The pharmaceutical and diagnostic unit, for example, both have research programs in HIV. Now, a companywide team exists to coordinate research and planning work. “We’ve made it clear we don’t expect our people to be in isolated fiefdoms,” White says. It may sound like much, but that sort of change represents a radical move for Abbott. And it's absolutely critical if White wants to transform this laggard into a major leader.

By Amy Barrett in Philadelphia
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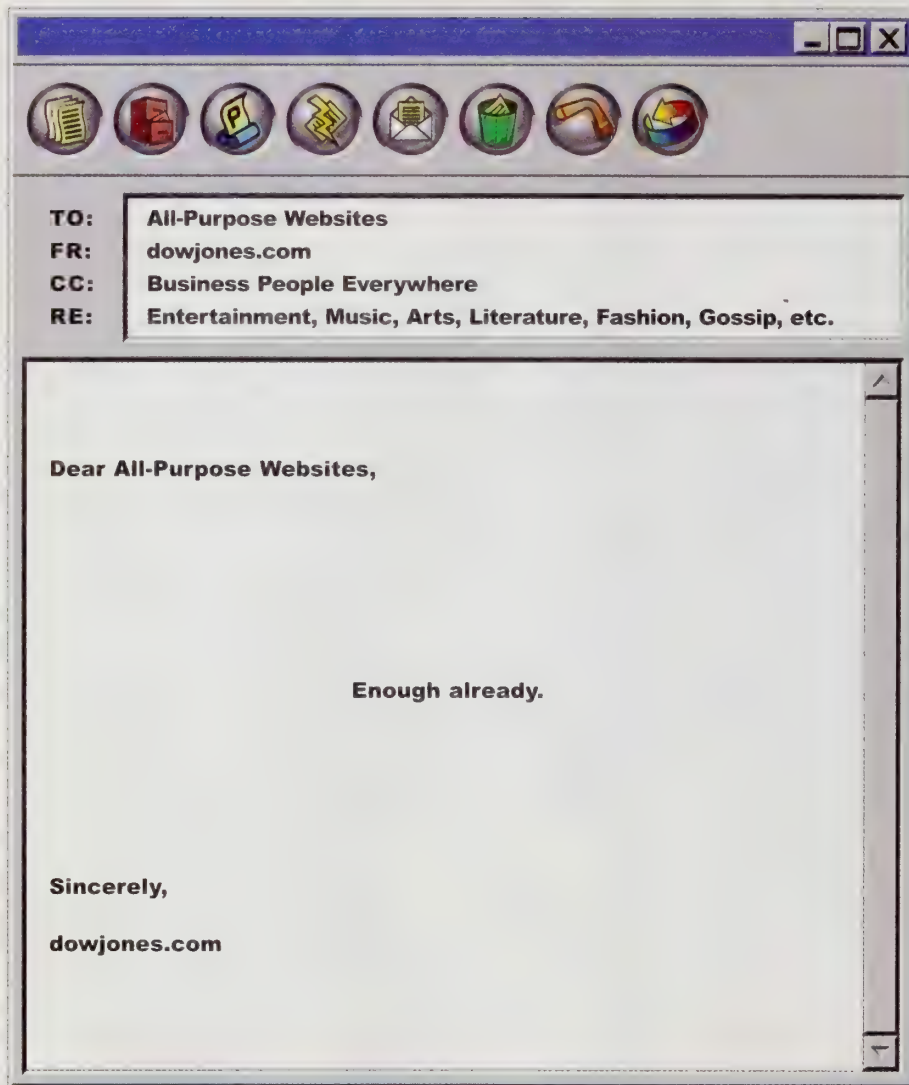
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banking software

Cover Illustration
Alison Seiffer

What's a Worker Worth?

WHAT'S THE TRUE measure of Man? Before you wax philosophical, glean some practical wisdom from Jac Fitz-enz. His company, Saratoga Institute, devises systems for measuring human capital—in other words, how much economic value employees contribute to their businesses. One of

Want to calculate your return on human capital? Suppose your \$1 million service firm earns \$500,000. Operating expenses total \$200,000, while \$300,000 goes to payroll and benefits.

	REVENUES	\$1,000,000
—	OPERATING EXPENSES (only for facilities, machinery, materials, and supplies)	— 200,000
—	PAYROLL & BENEFIT COSTS	— 300,000
=	ADJUSTED PROFIT	500,000
÷	PAYROLL & BENEFIT COSTS	÷ 300,000
=	HUMAN CAPITAL RETURN ON INVESTMENT (per dollar)	\$1.67



his favorite formula is what he calls the “human capital return on investment” (table), which calculates dollar-for-dollar profits against pay and benefits. How

use such numbers? Strung together over many months or quarters, they’ll help you understand whether you’re truly getting more for what are likely increasing employment costs. Most companies actually tend to underestimate human contributions, says Fitz-enz. On average, companies of fewer than 500 employees sock away \$1.68 in profits for each dollar in pay and benefits. “All assets other than people are inert,” argues Fitz-enz. “They don’t add value until they’re leveraged by a human being.”

Lost in the Translation



YOU’VE GOT TO E-MAIL a prospect in Paris, but your French doesn’t go past *éclair*. Now there’s help from free Web sites www.free-translation.com and www.systransoft.com. Both offer translations to and from English and French, Spanish, Portuguese, German, and Italian.

Be cautious, though. Despite their claim to interpret language contextually rather than word-for-word, the software often fails on slang and nuance—for instance, the difference between “arms” as weapons and “arms” as limbs. Our tips for users: Keep sentences short and direct. Use first names instead of pronouns, which are often imprecise. Add specifiers where possible, like “military arms,” for instance. *C’est clair?*

SO THEY SAY

“Everyone is realizing that you have to fight to keep the best people.”

—JOHN ONSTOTT, executive recruiter, on why entrepreneurs are beefing up benefits. (page F.34).

41%...

of small companies use written plans, such as an annual business plan or budget.

ONE IOTA

Wide-Open Spaces

IT’S BEEN NEARLY six months since tobacco makers forfeited some 3,600 billboards as part of the national tobacco settlement. So who rode in where the Marlboro Man rode out? Many small businesses, which are now snatching up the choice boards



once locked up in multiyear deals. “The inventory is returning back to the community,” says Tommy Teepell, sales director at Lamar Outdoor Advertising, which controls boards in 40 states. “It is a lot easier for everything from the small beauty shop to the local auto insurer to promote locally.” Beware: Pent-up demand is pushing some prices up as much as 20%. For more information, visit www.oaaa.org.

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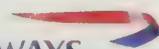
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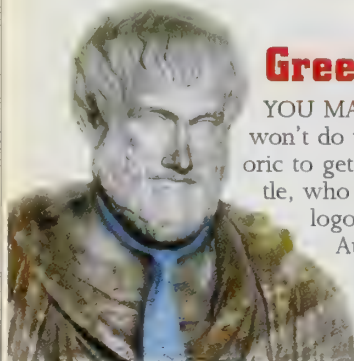
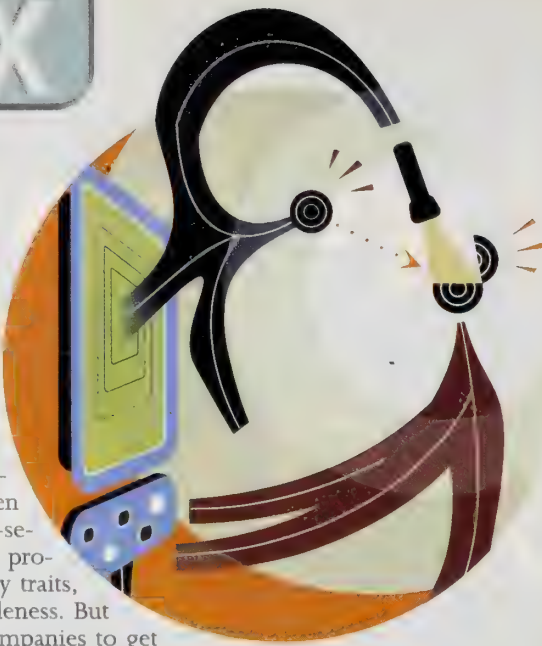
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Faster than A Rorschach

NEED TO HIRE someone quickly—but aren't sure how she'll fit into your company? New Web-based tests allow companies to conduct online personality screening, often overnight, before making job offers. Such industrial psychology tests have been around for decades. Using word-selection and analytical games, they provide a baseline view of personality traits, such as extroversion and agreeableness. But their move to the Web allows companies to get results far more quickly—and get hires in the door. At etest.net, run by Atlanta-based Management Psychology Group, users' tests are scored instantly. Pittsburgh rival Select International (www.selectintl.com) is aimed at technical employees and requires a software download. Depending on customization, you'll pay from \$150 to \$10,000.



Greek to Me, In the Good Sense

YOU MAY HAVE the slickest PowerPoint presentation in town, but it won't do you much good unless you've mastered the rudiments of rhetoric to get your point across. Where to turn? The wise hand of Aristotle, who outlined the basics some 2,000 years ago—ethos (character), logos (reason), and pathos (passion). Peter Thompson, a wisecracking Australian and recent author of *Persuading Aristotle* (\$19.95, Allen & Unwin), has adapted the philosopher's concepts to the business world. The result is a breezy, timely reminder that simple structure and spoken logic can be far more convincing than dizzying 3-D animations.

Who to Bank on

How are the nation's banking behemoths treating small business? To find out, the Small Business Administration reviewed the 1998 lending practices of the country's 57 largest banks (those with assets greater than \$10 billion), assigning each a "friendliness" score. The envelope please...

MOST FRIENDLY BANKS

BANK	LOCATION	SMALL BUSINESS LOANS AS % OF BUSINESS LENDING (97-98)	SMALL BUSINESS LOAN GROWTH	TOTAL BANK ASSET GROWTH
1. NORWEST CORP.	Minneapolis	57%	16%	5%
2. BB&T CORP.	Winston-Salem, N.C.	59	27	33
3. SOUTHTRUST CORP.	Birmingham, Ala.	40	32	19
4. WELLS FARGO & CO.	San Francisco	28	8	-6
5. FIRSTAR CORP.	Milwaukee	40	3	3

LEAST FRIENDLY BANKS*

47. BANKERS TRUST	New York	0.3%	-49%	37%
46. J.P. MORGAN	New York	2	80	21
45. STATE STREET CORP.	Boston	2	5	11
44. REGIONS FINANCIAL CORP.	Birmingham, Ala.	5	-89	22
43. REPUBLIC NEW YORK	New York	15	-3	10

*THERE ARE ONLY 47 RANKED POSITIONS BECAUSE OF TIES

DATA: SMALL BUSINESS ADMINISTRATION OFFICE OF ADVOCACY



FRONTIER
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News and advice from our
small-business Web site

Loans for the Lowlands

Hurricane Floyd's unruly path in the East Coast put some small businesses underwater, physically as well as financially. Others were left unscathed, but their owners are wondering how they can avoid the same fate. The Small Business Administration may have hit upon a solution. During fiscal year '2000 the agency will offer low-interest pre-disaster loans that will cover up to \$50,000 for repairs that mitigate potential flood damage, such as moving electrical facilities out of a flood-prone basement to higher ground.

A Gilded Helping Hand

Meet one of the hottest entrepreneurial-minded outfits around: eCompanies, a \$130 million venture-capital firm and business incubator begun by EarthLink Network founder Sky D. Dayton and former Walt Disney Web honcho Jake Winebaum. In exchange for at least half of the equity in your company, it lends office space, business contacts, and technology and finance advisers. So, just what is eCompanies looking for? "We're focusing on business-to-business and consumer-oriented e-commerce, definitely not infrastructure," says Winebaum.

Who Insures a Good Deal

Of all life's treacherous tasks, for match the job of selecting a business health plan. That's where Web-based insurance brokers are supposed to help, stepping in to streamline the process by gathering quotes from as many as 12 different insurers at once. Don't believe the hype, warns Dallas Salisbury, president of the Employee Benefit Research Institute. "You have no idea what all the technical details of the policy are because they don't put them on the Web site," he cautions.



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Taking Inventory

High demand has emptied shelves. Should you restock?

IF YOUR SHELVES have been looking bare lately, you're not alone. Faced with an unexpectedly robust first half of the year, businesses everywhere are carrying the smallest level of inventories on record.

According to the Commerce Dept., inventories economywide amount to just 1.34 times the level of sales, the lowest ratio in history. Businesses had expected the economy to slow this year and ad-

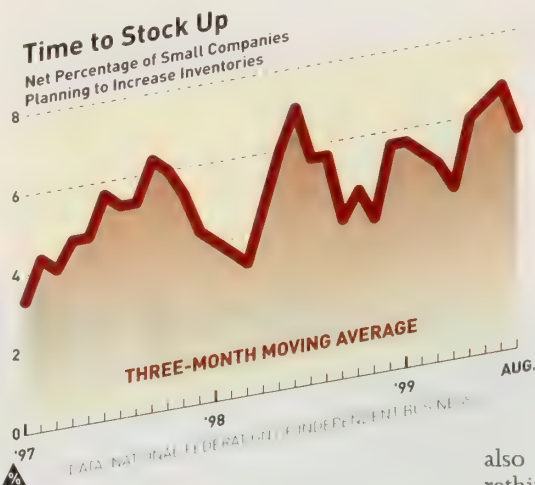
early 1999. Just 7% of its members thought their inventories were too high.

By contrast, the National Association of Purchasing Management, which follows companies of all sizes, says in its most recent survey that 38% of nonmanufacturers felt their inventories were excessive, while just 11% of manufacturers thought so.

Should you increase inventories, particularly as Y2K draws near? Check first if your suppliers' computers are compliant. But don't stop there, says Allen B. Falcon, president of Horizon Information Group Inc., a six-person technology and management consulting firm in Boston. "Think about their financial system, if they have been dependable in the past, and the reliability of the distribution system," he says. "What happens if their trucks can't deliver?" Falcon suggests lining up a contingent supplier. If you sell a product with Y2K risks, such as electronics or computer-enhanced tools, you may also need to revalue your inventory or rethink your warranty plans, he says.

Of course, carrying too much inventory has its downside for small, lean companies now that interest rates have risen. That inventory is more costly to keep on hand than it was six months ago. In the end, you'll have to do a careful balancing act to find the level that's right for your business. Isn't that always the way?

—KATHLEEN MADIGAN



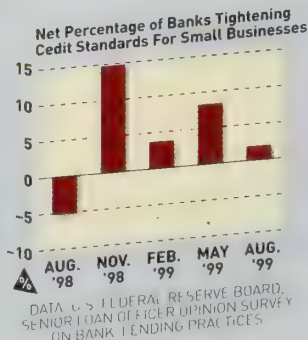
justed their inventory levels accordingly. Instead, growth has remained above 3%. Combine an economy that won't quit with the demand of the upcoming Christmas season. Add the threats of Y2K-related computer mishaps, real and perceived, and there are plenty of reasons why small businesses are looking to stock up now. The National Federation of Independent Business says in its August survey that more small-businesses are showing plans to build inventories over the next three months, after a slowdown in 1998 and



Learn more about controlling Y2K fallout by clicking Online Extras at frontier.businessweek.com

Sweet on Small Loans

Who's afraid of the big bad Fed? When the Federal Reserve boosted interest rates in June and again in August, small-business lenders barely blinked. Only 1.9% tightened credit standards—the lowest percentage of the year—and lending spreads stayed flat. Things are just going too well. August was 1999's strongest month for retail sales, up 10.5% from last year. Of course, such good news could prompt the Fed to hike rates another ¼%. But even that would only bring small-loan rates back to year-ago levels—still among the lowest in five years.



CURRENTS

Foreign Bodies

Can't find enough highly skilled American employees? Consider getting an H-1B visa for temporary, specialized foreign workers. While the 1999 quota has already been filled, you can apply for a 2000 visa now and start using those workers as early as the month.

"We have 15 people coming on H-1B visas per month from Oct. 15 through Mar. 15," says David Lawrence, director of marketing at InterSoft Technologies Inc. in Westford, Mass. Out of 65 employees, 52 have H-1B visas.

How do you snag one of the visas? By being speedy. "It's first-come, first-serve basis," says Michael Turansick, chair of the American Immigration Lawyers Association in New York and partner at Fragomen, Del Rey, Bersen & Loewy. "Small businesses are in the same position as Citibanks."

Turansick expects the 115,000 year-2000 H-1B visas to go as early as mid-February. To get an application, call 800 870-3676 and ask for Form I-129. You'll pay a \$110 application fee and a \$50 "education fee" toward training U.S. workers.

—KAREN CHENEY

Taxman in Kid Gloves?

The IRS is still auditing small businesses at twice the rate of the average taxpayer, as a recent report from the General Accounting Office shows. But look closer—the IRS may not be such a bully after all. Not only is the agency setting up a division to work exclusively with small businesses, it's also cooperating with the U.S. Senate Committee on Small Business to simplify the 200-odd forms that could apply to a small business.

Got suggestions? Add them to the committee's confidential IRS Paperwork Unpopularity Poll at sbc.senate.gov/irspoll/irsltr.html.

—STEVE BROOKS



When you call up and say you're a small business, do some businesses make you feel, well, um, small?

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What's Old is New

Mature Mart is doing well by doing good: Selling gadgets that make life easier for seniors



FAMILY HELP: Alexis Abramson hired her mother Phyllis to do PR; grandmother Rose does a monthly Web column

ALEXIS ABRAMSON, a former director of three senior centers in Atlanta, vividly remembers the moment three years ago when she encountered an elderly client sobbing at a hallway telephone, frustrated by her inability to read the standard-size numerals on the dial pad. "It broke my heart," says Abramson. She had often searched high and low for simple adaptive tools that would help seniors at her centers cope with failing eyesight, poor hearing, and arthritic hands. "Here for the lack of yet one more simple item, the seniors around me were suffering," she says.

That experience led Abramson, who has a Masters in gerontology, to a major career decision. She announced to her family that she had turned down a doctoral scholarship in gerontology. In the same breath, she asked her father for a \$50,000 loan to launch Mature Mart, a company that would act as a central clearinghouse for products to help overcome sen-

iors' physical limitations. Abramson also secured a \$50,000, SBA-backed loan and has since gotten two more \$25,000 loans—and paid them all back.

Today, Atlanta-based Mature Mart, with 1998 revenues of \$2 million, sells 20,000 products, such as a pill-crusher, a telephone amplifier, and a flashlight/magnifier, mostly by mail and online. An adept promoter, Abramson has plugged her products on the QVC Network and the Today show.

Mature Mart's 12 employees include Abramson's Mom Phyllis, 58, who does PR, and her grandmother Rose Holtzman, 87, who writes a monthly Web column.

Abramson is starting to attract notice. She just beat out 1,200 nominees for the "Entrepreneur of the Year" award from the Metro Atlanta Chamber of Commerce. Ken Dychtwald, president of Age Wave, a marketing firm in Emeryville, Calif. specializing in seniors, says Abramson "represents the fusion of two great American qualities: a passion to do good combined with a wonderful entrepreneurial flair."

And entrepreneurial she is. She couldn't resist bringing some copies of her new catalog to the U.S. Open. "Several people in the box were looking at them instead of watching the game," she says. Abramson herself seems to keep her eye on the ball.

—ECHO MONTGOMERY GARRETT



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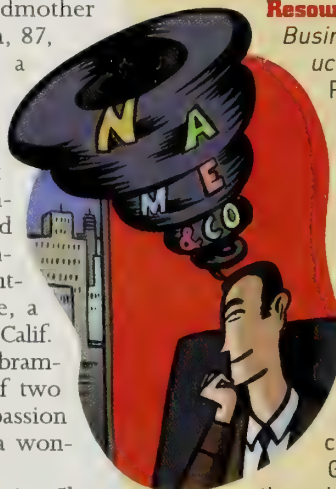
INSTANT EXPERT

When 'Acme' Doesn't Cut It

What's in a name? Plenty. A great moniker communicates the essence of your company, product or service. But finding one that sings—and isn't someone else's trademarked property—can be tough and expensive. Sure, naming consultants and ad shops will help for a price, but often, you can do it yourself.

Case In Point: MasteryWorks, a small Annandale (Va.)-based career development consultancy, went through nerve-racking experience every time they tried to name a new career-planning software program or workshop. With five or six new products yearly, CEO Caela Farren says they needed a system. Now, they assemble a team to brainstorm. First, the group lists words on a white board, looking for a combination that "hooks energy like a magnet," says Farren. Then, they submit the leading choices to some of their clients for feedback.

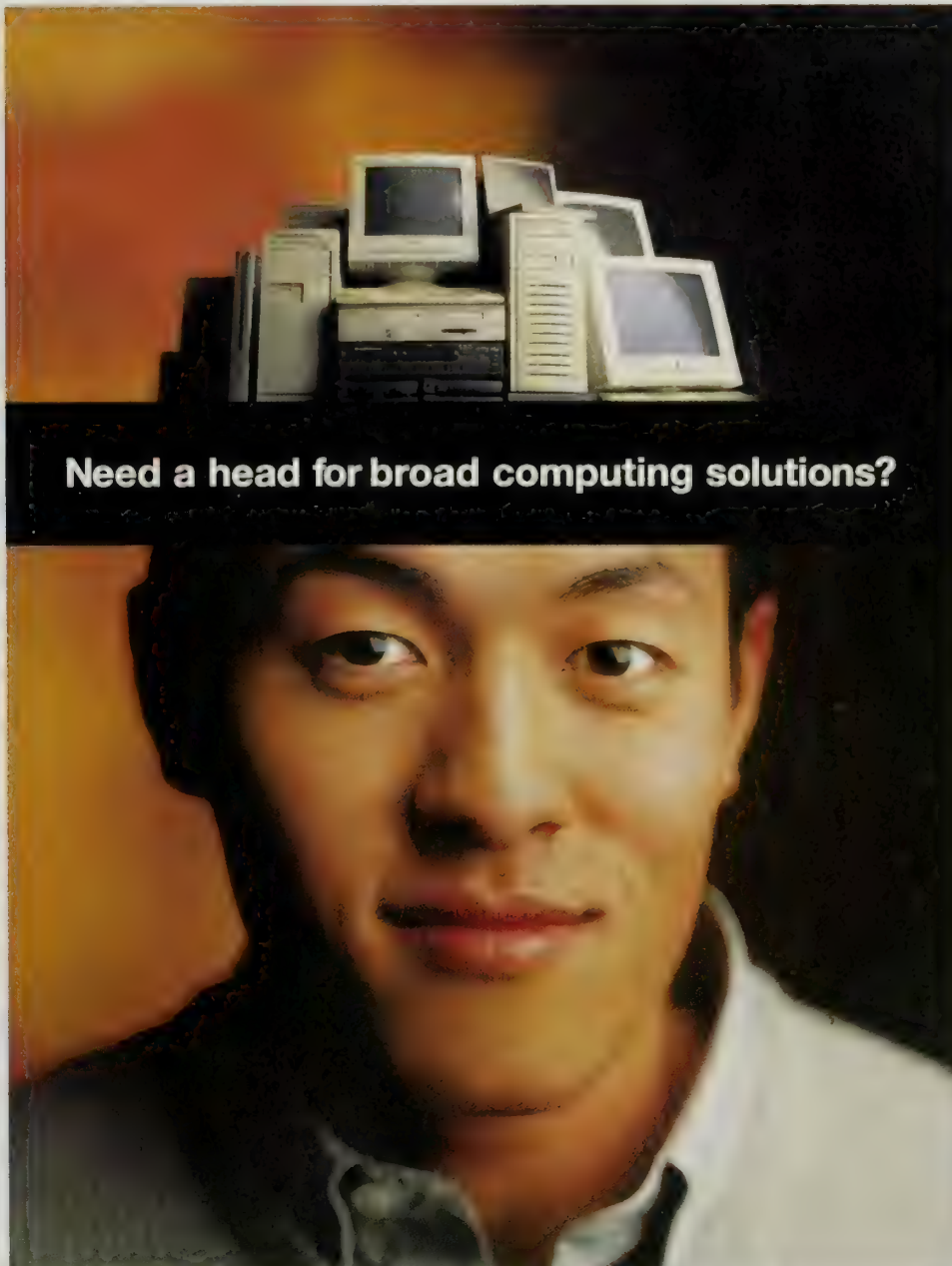
Resources: *Naming Your Business and Its Products and Services*, by Phillip G. Williams (P. Gaines Co., 1991). Despite a cutesy layout, it's a good overview of the creative and legal aspects. *Jump Start Your Brain*, by Doug Hall (Warner Books, 1995). Hall offers 37 "brain programs" to spur creativity.



Grit your teeth

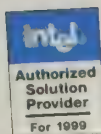
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—ALISON STEIN WELLNER



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Tricks of the Trade

Barter sheds its shady image to become a cash-saving tool for small companies

DOES YOUR COMPANY'S erratic cash flow keep you pacing the floor at night? One way to keep more dollars in the till is through barter—trading your goods and services for merchandise you'd normally have to buy with much-needed cash.

Take Biozone Scientific LLC. The manufacturer of air purification systems, based in Vero Beach, Fla., recently hired an ad agency to revamp its Web site and marketing materials. The tab? About \$30,000. But the 25-person company isn't spending a cent. Instead, Biozone is exchanging its systems for "barter dollars"—credit given in exchange for goods and services. Who dispenses this non-money? In Biozone's case, it's Barter Business Unlimited, Inc., a trade exchange in Bristol, Conn., that hooks up barter-friendly businesses. For every air system Biozone sells on the exchange, the manufacturer receives barter dollars of comparable value. With \$30,000 in credit, Biozone raised enough to contract the ad agency, also a member of the exchange.

Although hardly a new concept, barter has never been more popular. Thanks to the emergence of trade ex-

changes 15 years ago, barter has escaped its dubious image of unscrupulous businessmen secretly dodging taxes by swapping goods off the books. Now it's a well-governed sales vehicle for the small-business marketplace, incorporating about 400,000 companies.

The National Asso-



ciation of Trade Exchanges estimates barter's growth at 10% annually, with trade as high as \$4.3 billion a year.

On the books, barter and cash transactions are treated the same by both accountants and the Internal Revenue Service. Barter sales add to the bottom line, while barter purchases are booked

as operating expenses. The only difference is that come tax time, Uncle Sam wants to see barter sales listed on 1099B form. And don't even try to fudge the numbers. The valuation of trade-exchange deals are tracked and reported to the IRS. If your figures don't match, you're busted. And don't go overboard. Let barter reach more than 5% to 7% of sales and you may not have the hard cash to pay the staff or the electric bill. The more company costs vary from month to month, the greater the risk that heavy bartering will choke cash flow when revenue dips. On that basis, barter works best when you have too much inventory.

To find an exchange, try the National Association of Trade Exchanges (www.nate.org) or the International Reciprocal Trade Assn. (www.irta.net). But choose carefully. Kurt Kluznik, owner of Yardmaster Inc., a Cleveland landscaping firm, couldn't find the right mix of products and services on his first exchange. Now at Euclid, Ohio-based American Trade Exchange, he barter for trailers, trucks, office supplies, and ads. Sounds like the barter industry has the goods this time.

—KAREN M. KROLL



For details on selecting a trade exchange, click Online Extras at frontier.businessweek.com.

Smart Answers

Q: How can I create a single corporate culture at my small but rapidly expanding company? Our executives all come from different backgrounds and have their own agendas.

—T.H., New York City

A: You need to establish a strong vision and people philosophy that all of your executives can support. Your challenge: getting those execs to openly discuss company values. Consider a weekend retreat or, if that's unaffordable, an off-site meet-

ing where your team can discuss the company's core values: What's important to your business? How are customers and employees treated? Where should the company be headed? What are its strengths and weaknesses?

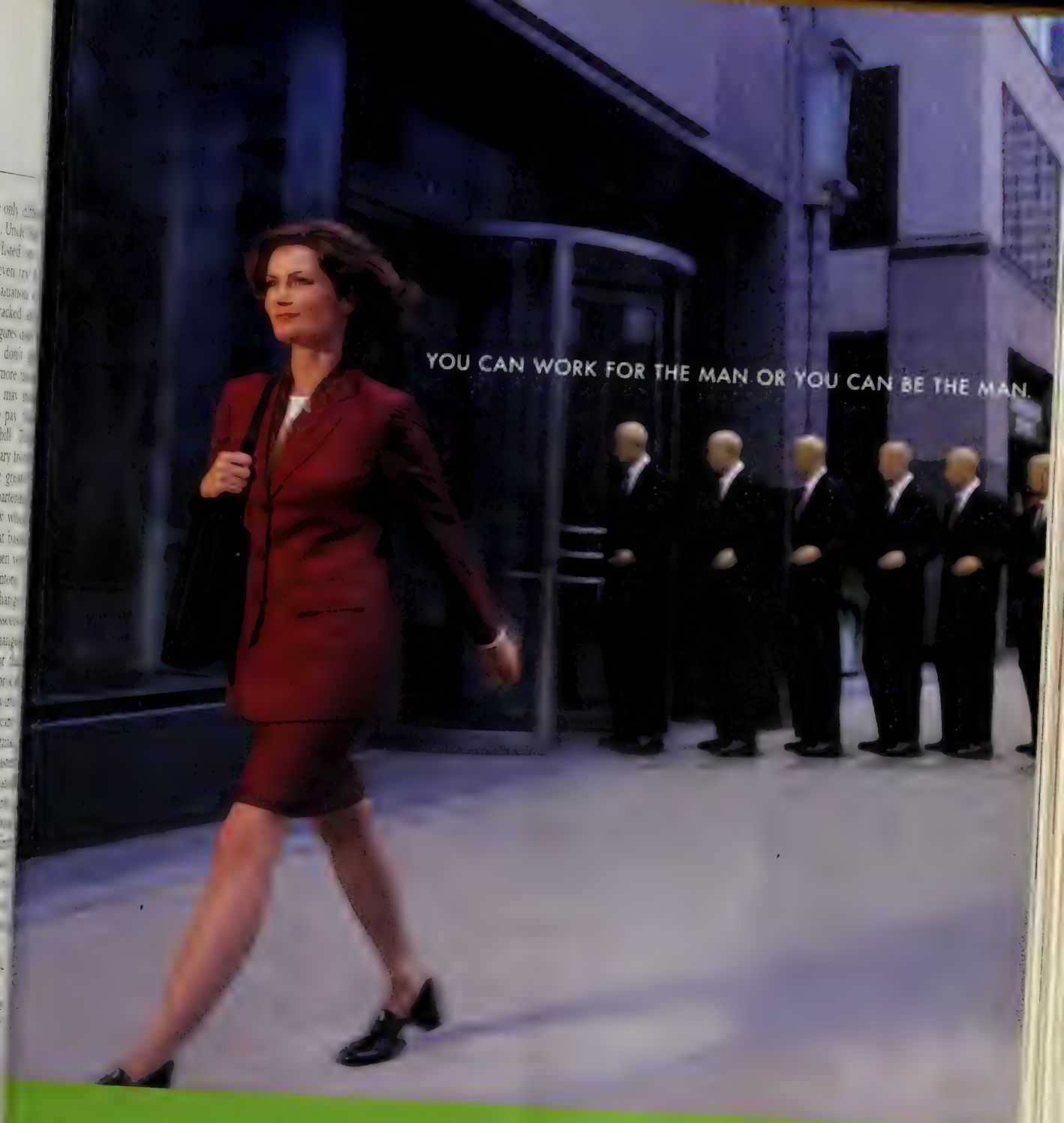
If you show respect for your managers' business experiences, "people will be less likely to sabotage progress and more likely to work together," says Danette



Mueller, a consulting partner at Leverage Systems, a St. Paul (Minn.)-based human resources consulting firm. The results of a more cohesive culture? Improved employee retention and productivity, better customer service, and a boost to the bottom line.

—KAREN E. KLEIN

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Mine Your Own Business

There are plenty of places to find cheap market data—including your own records

SMALL BUSINESSES have been flying blind," says data demon Jon Brandow. Historically, they have made little use of business intelligence: the demographic mapping, databases, and market research deployed by large corporations. That's all changed, says Brandow, head of economic-development consultancy bizminer.com. Now, there's a wealth of free data on the World Wide Web, lower-cost research from commercial databases, and cheap software that helps small companies analyze their sales—if you know how to use it. Brandow, a former union organizer, spoke recently with Frontier's Dennis Berman. Some edited excerpts:

Q: How can a business owner tell good data from bad?

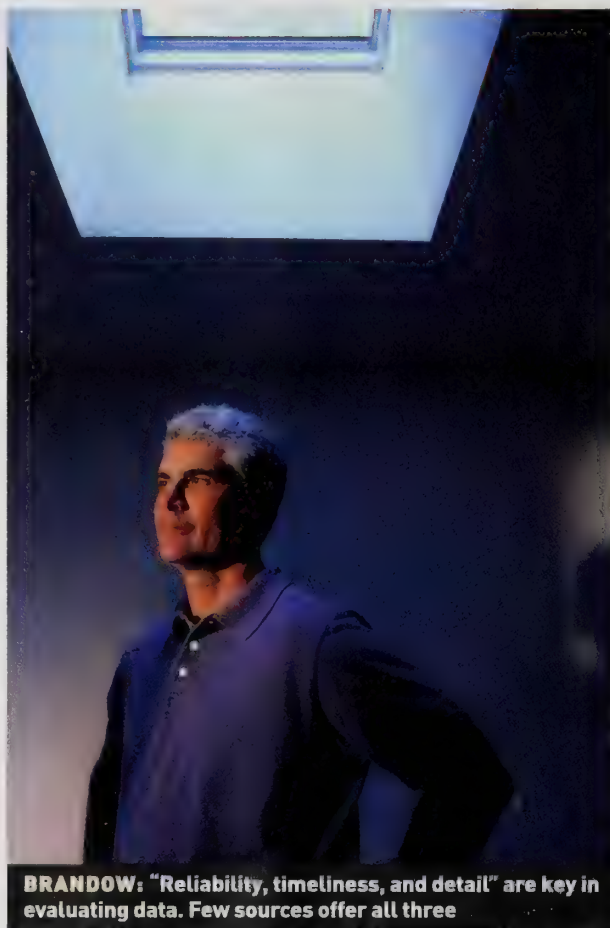
A: There are a number of ingredients to good data: reliability, timeliness, and detail. Government data tends to be reliable, but there is poor detail. Most of it, for instance, does not include one-person sole proprietorships. Then there's timeliness. Right now, 1996 is the latest year for which government data is available. As for reliability, I will not use some private-sector databases compiled before 1995. They're full of errors.

Q: How detailed is the data from private databases?

A: In the past, if you were looking to go into frozen desserts, you would have to look in the broad category of frozen-milk desserts. Today, we can break it down to the level of whether you're using popsicle sticks or not.

Q: Well, so what? How can you actually use that information?

A: Once you understand larger industry trends—such as sales and employee



BRANDOW: "Reliability, timeliness, and detail" are key in evaluating data. Few sources offer all three

growth—you can then benchmark your company against competitors. It's also a sheer resources issue. If you're targeting new customers, you could try to reach 100,000 new companies. But it's a tremendous advantage to use databases to identify the 1% most likely to want your products.

Q: Who provides this information?

A: For free information, the best spot to visit is the Census Bureau's Web site. It offers an enormous amount of useful government economic data, and you can get down to the county level, analyzing 350 different industries.

Dun & Bradstreet Corp. sells excellent credit-reporting data, which give you some of the best information on

individual companies. InfoUSA Inc. also has a nice CD-ROM with as much credit information as D&B. A company called CACI International Inc. puts out very good demographic information that divides the population into 43 different types of consumers.

Q: What about costs?

A: In terms of helping target prospects, \$1,000 would buy two CD-ROMs with databases of several-million-plus companies of various sizes. If you want the companies to do a customized search on, say, 20,000 plumbing companies depending on the information you wanted, it would cost 10¢ to 35¢ per. On some other databases, it would cost you up to \$5, but there, you're getting a mini-credit report.

Q: How can you use geographic targeting?

A: With Census Bureau data, you can analyze countywide business patterns, while private databases allow you to penetrate down to the ZIP code. Say you want to start a pizza shop in downtown Harrisburg. Databases will tell you how much competition you have in the neighborhood, whether suppliers are in the same neighborhood, and who are your target customers.

Q: How can a small business convert the normal data they generate, such as shipping records, into a real analytical advantage?

A: If you can create a database that tracks customers and their characteristics over time, you can use it to target new, similar customers. You'll have to invest time. But once you have the data, you might be surprised to realize that your best customers are, say, companies under 150 employees. That's very valuable.



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Apple to the Core

Fans insist that Macs can't be beat for design and productivity. Are they right for your company?

IN THE WORLD OF mainstream business computing, they're derided as fanatics—slightly daft and hopelessly in love. Is there any other explanation why a sensible, profit-oriented business owner would stick with Apple's Macintosh to run the whole operation when nearly the entire business world runs on a different, and often incompatible, Wintel platform?

Leslie Eiser thinks so. "The ease of networking is unbelievable," says Eiser,

under two days," she says. The company, which makes gourmet soups and sauces, started migrating to Macs about a decade ago after Eiser put one in front of a secretary who was designing promotional materials. "Her productivity skyrocketed," she says. "The other secretaries said, 'how come she got that computer and we didn't?'" Now with 32 Macs—including 20 iMacs—strung into its network, E.D. Foods even controls manufacturing with a



After factoring in lower training costs, says one analyst, Macs stack up well against PCs

who is international sales manager and sometime computer specialist for E.D. Foods Ltd. of Pointe Claire, Quebec. Recently, she set up a battery of iMacs in less than 20 minutes per computer. "I can't install a PC out of the box in

Mac server, doing real-time processing to track inventory, monitor and control cooking, analyze sales statistics, and the like. If it sounds like a good argument for an all-Mac business, don't forget the glitch: For payroll, the company has to use a PC with Windows because it couldn't find Mac software that would handle the intricacies of Quebec's tax code.

That's the kind of obstacle that argues against the Mac as a platform for business. But diehard Mac fans insist that "business Mac" is not an oxymoron, despite the company's modest 9% share of the small-business desktop

RANDOM ACCESS

Pay Your Bills on the Net

Tired of creating and sending invoices, and filling out and submitting expense forms? New services let you perform these tasks more easily through the Internet. TimeBills.com offers a Web site where you can key in time and expenses incurred on behalf of clients and then get a summary of the activities. Best of all, the service creates and sends paper invoices. Customers receive a mailed invoice that includes detachable payment coupon and pre-addressed return envelope. The cost is \$4.95 for every three invoices submitted (www.timebills.com).

ExpensAble.com is an Internet service that accepts travel and entertainment expenses from business travelers, who can submit expenditures through a Web-connected computer. Companies can also use the Web site to immediately review and approve workers' expenditures. ExpensAble.com offers different subscription levels and customized services (www.expensable.com). While neither service collects money, both use the Net to get the paperwork rolling. —WAYNE KAWAMOTO

market. And they claim much has changed in the past two years to alter the equation. For starters, Apple Computer Inc. is no longer seen as a basket case, financially or technologically quelling doubts among business clients about buying a machine whose maker won't be around to support it. At least one influential technology research group contends Macs are no more expensive to own than PCs. And the Cupertino (Calif.)-based company has issued a host of new products, including a cutting-edge desktop model, the G4. The question is whether the new appeal will outweigh the unique problems that Mac devotees must endure.

At C.W. Keller & Associates Inc., for example, plans for the company's pricey, custom-made wooden fixtures and furniture are drafted on Macs. But the two computer-controlled beamsaws that speed production at the 40-worker shop in Plaistow, N.H., take their orders from PCs that run Windows software. So for about the last

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four years, workers painstakingly transferred instructions into the saws' controllers manually. This year the company spent an estimated \$20,000 writing its own software that translates Power Mac instructions into Windows code. Still, Senior Product Manager Shea Dimock says it was well worth it. Her staff finds designing on a Macintosh so much easier that she fig-

A big problem: Coming up against government systems that only recognize Wintel

ures the Macs earn back at least that much in higher productivity and lower training costs in the months after she brings in a new hire.

Some tech experts call this Mac devotion "religious," and it's a trait found in nonbusiness users, too. But Roger Kay, research manager for technology analysts International Data Corp. based in Framingham, Mass., says the devotion on the part of small businesses—which often can't afford a professional systems manager—is entirely rational. "You don't have to know too much about computers. Macs are pretty self-explanatory and they're user-friendly," he says. As for the more tangible considerations, here's how it looks now:

Cost: Macs stack up pretty well, says analyst Mark Margevicius with The Gartner Group, based in Stamford, Conn. True, the initial outlay is often much higher than it is for a PC, but Gartner looks at the total cost of ownership—including installation costs, technical support, administrative time, training, and work hours lost to downtime, among other costs. Do the math, he says, and the Mac comes out even with Windows 95 and Win98.

Software: Developers aren't shunning Apple as they did when its future was

in doubt, but there are still some lingering effects. "You're not going to have as big a selection," says Gartner analyst Kevin Knox. For instance, you can't get Lotus SmartSuite for Apple, but you could make do with the rival Microsoft Office program. Bottom line: You can get what you need, if not always what you want.

Compatibility: There's always that glitch. Just ask Dr. Joseph Hildner, who owns a medical practice with a payroll of about 25 in Belleview, Fla. His Mac couldn't receive and send Federal Aviation Administration forms for pilots' flight physicals that he frequently performs. When the agency started requiring that reports be filed online, he broke down and bought a PC. That was all right with his business manager, Susan Kennedy, who

Boston, points out that if software sides and runs on the Net, instead of being installed on computers, a computer with a Web browser will be able to get all the programs it needs. Margevicius adds that under circumstances in which Macs and PCs can co-exist, it's less radical to go with Apple. "It's not as big a decision as it once was," he says. "The religious fervor is less important."

Support: The pool of people with expertise on Apple systems just isn't as deep, which makes hiring and swapping tips harder. And for all the passion of its adherents, Apple does precious little to court small-scale operators. The company peddles its wares only indirectly through third-party resellers, and it doesn't operate a special support unit for small companies. Unlike many large technology companies such as IBM, Gateway, Dell Computer, and Microsoft, Apple has no strategic group devoted to small business affairs. Visitors to apple.com won't even find a small-business page. In fact, Apple didn't want to put anyone on the phone for this story.

Still, Apple's not entirely alone in its oversight. PC makers in general are just waking up to the potential of sales to small businesses, says Knox at Gartner. "Apple's not starting from way behind the rest of the industry," he says. Indeed, many small-business units at many big companies are less than three years old.

In the meantime, Mac fanatics can enjoy their "Think Different" underdog status. Eiser, in fact, capitalizes on it. "The best thing about being a Mac house," she says, "is that I don't have to deal with those dumb software salesmen. I can eliminate 90% of them by asking, 'Does it work on a Mac?'"

—JEFF ZYGMONT



Me and My Mac

Are Macs superior to PCs? This long-running debate is often called religious: It depends how you see things.

SUBJECT	MAC PARTISANS CLAIM...	WINDOWS PC DEFENDERS REPLY...
AESTHETICS	Breathtaking designs, nifty colors	So what
AVAILABLE SOFTWARE	Universal software coming soon to the Web	Store shelves crammed with Windows titles today
COMPATIBILITY	Built-in translators read, write Windows files	Translators don't always work
COST	Easy upkeep makes lifetime costs lower	Very low purchase prices
NETWORKING	Plugs in out of the box	Web makes all networking easy
USER FRIENDLINESS	So easy to use it's fun	New Windows versions close the friendliness gap

says she had never before seen a Mac in her 15 years in medical administration. But now her PC must share files with Hildner's Mac laptop. "They don't always like to talk to each other," she says. "He can hide files in all kinds of places where I can't find them."

This problem seems likely to fade as Net-based computing becomes more important. Laurie J. McCabe, vice-president of Summit Strategies Inc., high-tech marketing consultants based in



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IT'S NEVER BEEN this crazy before. Recruiting and retaining the best people has always been hard for small companies, which often have to stand in line behind bigger, better-heeled employers.

But with national employment at an all-time high, the perks some companies are lavishing on employees sound less like innovation and more like desperation. ♦ Need a new car? We'll lease you a late-model

luxury sedan, and you don't have to be a manager to get one. Strapped for your kid's college tuition? We'll foot some of the bill. Caught in a time crunch? We'll do your laundry or even pay for a maid. Flex time, telecommuting, full-body massages—whatever it takes to make you feel right at home. You can even bring your dog or cat to work, and we'll toss in pet health insurance.

No, we're not kidding—you can't make this stuff up (see photos, page F.34). Entrepreneurs are going all-out to recruit the people they need. There's Revenue Systems Inc. in Alpharetta, Ga., which leases a custom-built, fully insured BMW with unlimited mileage for every employee. In Montreal, Zero-Knowledge Systems, an Internet privacy company, has resorted to private screenings of new movies and doing laundry for its 65 employees: drop it off on Tuesday, pick it up on Wednesday folded, pressed, and crowned with a colorful lollipop. And some companies are getting ruthless about retention. "We recruited a guy from a small information-technology company for a client," says Joseph E. Onstott, managing director of the Onstott Group, a small Wellesley (Mass.) executive search firm.

"His employer offered him a \$200,000 check to stay. He refused. So they called his wife and told her about it, and when he got home, she said, 'Are you nuts?' He stayed put."

Get used to it: There's no relief in sight. The jobless rate has been stuck below 5% for more than two years and shows little sign of budging. So if you haven't beefed up your benefits and compensation package lately, your best people are tempting targets for your rivals, and you'll have a hard time luring qualified replacements.

The trick, of course, is to beef up benefits without going broke. That's not easy when the cost of a basic benefit like group health insurance is rising at 6% to 12% annually, says Buck Consultants. Pleading poverty is no longer an option, says Wendy C. Handler, assistant professor of management at Babson College. "You can't get out of providing health insurance or a retirement plan by arguing that you can't afford the gold standard," she says. But you may be able to afford a stainless-steel standard—a package of benefits big enough to keep your company competitive but small enough to fit a limited budget. With a little tinkering, you can assemble a plan that includes modest

by Lynn Brenner





WHITER-COLLAR WORKERS: Zero-Knowledge Systems workers drop their dirty clothes off on Tuesday and pick them up clean the next day

medical insurance, a payroll deduction plan that lets employees pay pretax dollars for medical and dependent-care expenses, a basic retirement plan, and a few other goodies.

It's not as hard as it sounds. For starters, you're not really competing head-to-head with huge corporations for every employee. True, an IBM or a Microsoft is able to offer an array of benefits that you can only dream about. But a small company

can offer greater flexibility and opportunity for growth, which shouldn't be underestimated, especially since some people recoil at the idea of working for a corporate giant. In fact, says benefits consultant William G. Bliss, presi-

dent of Bliss & Associates Inc. in Wayne, N.J., small companies are now better positioned to attract the best and brightest than the larger companies.

With that in mind, an effective package must include features designed to attract and reward the employees you want. For instance, the first benefit established by Morris Financial Concepts, a

Charleston (S.C.) financial planning firm, was paying for its four employees' ongoing educational expenses. "I wanted to hire professionals who want to continue to learn," says owner Kyra Morris. And at Brella Productions Inc., an Evanston (Ill.) video production company, nine workers set their own hours from the day they were hired. "Controlling their schedules is very attractive to the kind of employees we target—people in their 20s and early 30s," says President Bernadette Burke. "And whenever possible, we give the option to work from home."

Obviously, your needs depend on the industry you're in (tech employees will expect stock options) and the average age of your staff (younger workers will care as much about a retirement plan). And soft perks aren't enough. You'll need a core package of basic benefits.

Take a look at the table appearing on page F.25. It illustrates three packages of core benefits in different price ranges. Sure, you might be too strapped to provide the best health insurance in town, but perhaps you can make up for shortcomings with noncash benefits like flexible time or stock options. And you can enhance or upgrade individual components as your company grows. But without these basics, your chances of holding on to anybody in this economy are pretty slim.

HEALTH PLANS

Nothing is more basic than medical benefits. "Many, many people work simply for health-care coverage," says Joan Vines, principal at Grant Thornton LLP in Washington, D.C. Small group health insurance isn't cheap. Many companies reduce health-care costs by passing along part of the bill in the form of bigger deductibles and copayments, or by paying only for employees' coverage. "It's becoming almost standard for the employee to pay for dependent care," says Vines.

A smart, inexpensive way to soften the blow to workers' wallets is to arrange for them to pay their premiums in pretax dollars through a payroll deduction plan known as a section 125. Benefits consultants say these plans are underused because most small employers have never heard of them. A basic section-125 plan for premium payments costs between \$250 and \$500 a year, says Bradley C. Fields, co-owner of Northwest Benefits Group Inc. in Portland, Ore.

You can cut health-insurance costs and reward key staff at the same time by offering two medical plans: a low-cost version that appeals to the rank-and-file, and a higher-priced model for executives. For example, you could pay 100% of the premiums for a health maintenance organization

The trick is assembling a package that offers the basics without going broke

Bennies that Fit the Bill

Let's get real: You want to offer great benefits, but you also don't want to go broke. These packages were designed with both goals in mind, based on your economic circumstances.

BENEFIT	ECONOMY PLAN	MODERATE PACKAGE	DELUXE PLAN
HEALTH INSURANCE	HEALTH MAINTENANCE ORG.*	INDEMNITY PLAN**	INDEMNITY PLAN**
Annual deductible	None	\$500-\$2,500 (individual)	\$100 to \$500 (individual)
No. of deductibles/family	NA	3	2
Co-payment	\$10 to \$15 per visit; similar fees for prescription drugs	NA	NA
Coverage	100% for doctor visits after co-pay 80-100% for hospital care	80% of reasonable and customary charges up to \$5,000, then 100% Prescription drugs optional	80% to 100% of charges up to \$2,000-\$5,000, then 100% Prescription drugs optional
Monthly premium, indiv.	\$143-\$190	\$180-\$240	\$240-\$300
Monthly premium, family of four	\$400-\$530	\$300-\$475	\$475-\$1,000
RETIREMENT PLAN	SIMPLE IRA	401(k) PLAN	401(k) PLAN
Employee contribution	Up to \$6,000 a year	Up to \$10,000 of salary a year	See details in column 2
Employer contribution	3% of employee's salary	Discretionary	PROFIT SHARING PLAN
Administrative cost	Minimal. The plan can be purchased directly from no-load mutual fund company and administered internally	25 employees: \$1,500 to \$2,500 a year	Discretionary employer contributions (Administrative cost: \$200 a year)
PAID LEAVE	Sick days, vacation, holidays	Sick days, vacation, personal days, holidays	Sick days, vacation, personal days, holidays, comp days
SECTION 125 PAYROLL DEDUCTION PLAN	NA	Lets employees pay their share of premiums, plus dependent care and unreimbursed medical expenses in pre-tax dollars	***See left, plus a choice of additional employer-paid benefits like a wellness plan, childcare reimbursement account, medical savings account; and employee-paid benefits such as group long-term care coverage
Administrative cost	NA	\$400 to \$500 a year for premium-only plan, plus \$5 to \$10 per employee per month for dependent care and medical accounts	No additional administrative cost
LONG-TERM DISABILITY INSURANCE	NA	After 90 days, pays disabled employee 60% of salary up to \$5,000 or \$6,000 a month, for five years	See left
Cost	NA	About \$20 a month per employee, depending on average age of the group	
SHORT-TERM DISABILITY INSURANCE	NA	NA	Pays disabled employee a weekly benefit equal to 60% of salary up to \$1K a week for 26 weeks
Cost	NA	NA	Depending on group demographics, \$25 to \$30 a month per employee
LIFE INSURANCE	NA	Covers eligible employees for \$20,000 or multiple of salary up to \$50,000	One times salary without a cap
Cost	NA	\$2 to \$3 per employee per month, depending on average age of group	Depends on employee demographics

* Costs vary based on type of business, age of employees, co-payments, extent of coverage. ** Assumes group of 20 people or more. Availability and cost of health plans depend on state regulations. Many employers share the cost with employees. *** Assumes 35 or more employees.

DATA: MORRIS FINANCIAL CONCEPTS, NORTHWEST BENEFITS GROUP, AND AMERICAN ECONOMIC GROUP

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plan that covers people only when they use network doctors, and pay only 65% of the premium for a point-of-service plan that provides coverage outside the network, too, says Eugene J. Koster, health insurance division manager at American Economic Group in Watchung, N.J. Or you could lease workers from a professional employer organization (PEO), which can provide them with richer benefits than small companies can afford, says Steve Rosenthal, president of EPIX, a PEO whose average client company employs 20 people.

FLEXIBLE SPENDING ACCOUNTS

For an extra \$5 to \$10 a year per employee, the plan can include flexible spending accounts, in which employees set aside part of their salaries to pay for dependent care and unreimbursed medical expenses. They pay no income taxes on money diverted into a flexible spending account—and neither do you: “You save about 7.5% to 8% in Social Security and federal unemployment taxes on money employees put into these accounts,” says Fields.

What can they use the money for? A surprisingly broad array of services, including day-care centers, in-home nursing—even summer camp. Eligible medical expenses include health insurance deductibles, co-payments, and co-insurance, plus expenses not covered by most plans such as prescription glasses, contact lenses, air conditioners, and filters for allergy relief, a reclining chair prescribed by a doctor, acupuncture, psychiatric care, and whirlpool baths, to name just a few.

RETIREMENT PLANS

These are ranked second in importance only to medical coverage but are currently offered by just 20% of all small companies, says Spectrem Group, a San Francisco benefits-consulting firm that just completed a landmark study of 2,600 small employers. But don't get complacent: The figure tops 50% for small companies of more than 20 people,

and thousands more plan to start offering one within two years.

Why the lag? Perhaps it's because more than a third of small-business owners polled this year by the nonprofit Employee Benefit Research Institute were unfamiliar

with the least expensive retirement plan they can offer—the simple IRA, which was created specifically for small businesses. Simple IRAs require no reporting, can be administered internally, and cost about \$10 per person to set up. The only expense is your mandatory contribution: 3% of payroll.

But no retirement plan is as attractive to employees as the 401(k). A 25-person plan costs about \$2,000 to \$2,500 to set up and about \$1,500 to \$2,000 a year to run, says Fields—not counting any matching contribution. Still, even generous employers don't always provide a 401(k)

Keeping Up

You'll be hard-pressed to retain good people if your benefits package doesn't include items offered by most of your rivals. These perks are offered by more than half of all small companies with less than 100 employees.

LIFE INSURANCE	92
PROFESSIONAL DEVELOPMENT	92
PROFESSIONAL MEMBERSHIPS	82
EMPLOYEE KEEPS FREQUENT FLYER MILES	83
DENTAL INSURANCE	83
PRESCRIPTION DRUG PLAN	82
FREE CALLS HOME WHILE TRAVELING	76
MENTAL HEALTH INSURANCE	66
PPO MEDICAL PLAN	65
VISION INSURANCE PLAN	58
HMO MEDICAL PLAN	55
FLEXTIME	50

DATA: SOCIETY FOR HUMAN RESOURCE MANAGEMENT, 1999

A profit-sharing plan is a good alternative to handing out equity in your company

match. One company that doesn't is Northshore International Insurance Services Inc., an 85-person Salem (Mass.) company whose benefits are competitive with those of much bigger companies. “We have a 401(k) plan, but we don't do a match because it tends to be disadvantageous to lower paid people,” says David Ives, company president. “They can't take full advantage of it. Instead, we put money into a profit-sharing plan, so everyone gets benefits on an equal basis.”

A profit-sharing plan is also a good alternative to handing out equity in your company, which is increasingly demanded by highly skilled employees. Generous profit-sharing and handsome bonuses let employees participate directly in the growth of the business, says Larry Elkin, head of a financial planning firm in Hastings-on-Hudson, N.Y. “When people ask for equity, what they often mean is that they want more money,” he adds, “not the management responsibility that goes with control.”

THE EXTRAS

So what can you skimp on? Group life insurance, disability coverage, dental insurance, long-term-care coverage. Everyone agrees that dental insurance is overpriced. “You don't get much more than your premium back,” says Steven Kaye, pres-

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ident of American Economic Group. As for life insurance, "the type of people I was looking to hire already had their own," says Kyra Morris. And if you have enough money for only one health-related program, disability insurance isn't an economically efficient benefit, Elkin points out. "When I buy health insurance for employees, it's tax-deductible to me and tax-free to them. But if I buy their disability coverage, their benefits are taxable."

Suppose the worst happens and your most valuable employee announces she's going to leave. Should you try to keep her with a massive counter-offer and lavish new benefits? Probably not, says Bliss. "Something psychological happens—the owners now think they own the per-

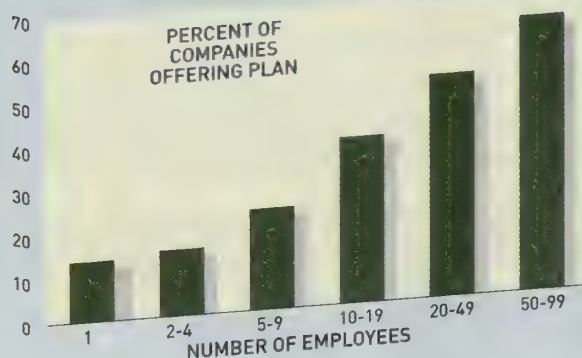
son." The resulting friction usually leads to resignation a few months later. "At the moment, you're buying yourself a little time," he says. A better strategy is to have the fringes in place ahead of time so they're not a sore point, he says—and then don't rely on them too much for retention. The decision to stay is more often based on how much recognition and respect the boss gives to a prized staffer than on how much the co-payment is on the dental plan. Pay more attention to your management style, and everyone will benefit.



Learn more about designing a benefits package. Click Online Extras at frontier.businessweek.com.

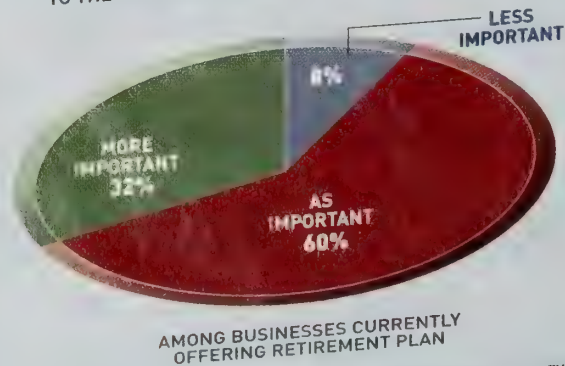
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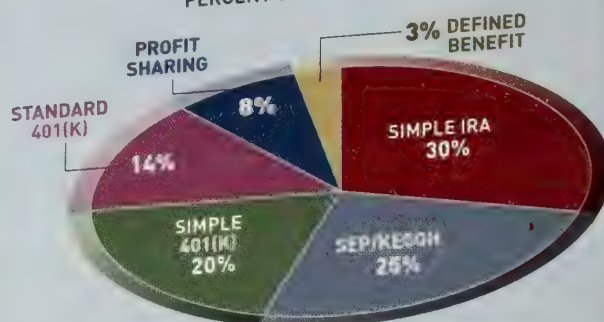
...BECAUSE ENTREPRENEURS THINK SUCH INCENTIVES ARE NECESSARY...

IMPORTANCE OF ALL EMPLOYEE BENEFITS TO THE BUSINESS, COMPARED WITH TWO YEARS AGO



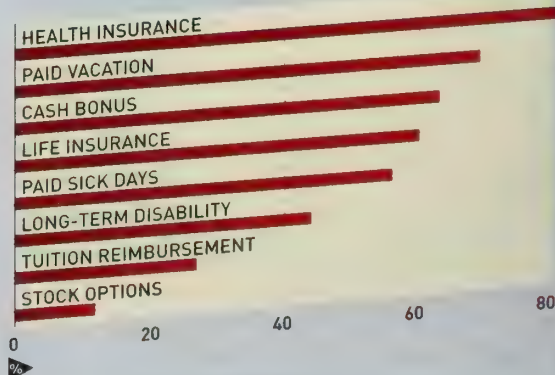
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PERCENT OF SMALL BUSINESSES



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DATA: SPECTREM GROUP SURVEY OF 2,601 COMPANIES WITH FEWER THAN 100 EMPLOYEES

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A Healthy ATTITUDE

There's more to cutting health-care costs than finding the lowest price

PATRICIA HALO would be an expert on small-business health benefits even if she hadn't written the book on it (*Managing Health Benefits in Small and Mid-Sized Organizations*, \$35, Amacom Books). Halo has been running an 11-person consulting company in New City, N.Y., for more than two decades, and she makes a point of coughing up money for a health-maintenance organization that includes prescription-drug coverage because she thinks it's vital to a healthy business. But making health care affordable means more than just shopping for the cheapest plan, Halo tells frontier's Rick Green. Some edited excerpts:

Q: Is it harder for small companies to hold costs down?

A: That's true. I don't think they can possibly do it all themselves and do it well. Picking a good adviser is key. Often these things come down to personal relationships, but you need to measure the scope of their services. An agent may represent half a dozen companies, or only one. If an agent represents only one, guess which one he's going to try to sell you.

Q: How about putting the plan out for bids each year to get the lowest price?

A: It's not a good idea to do a plan review more than every two or three years. First, there are certain costs that are charged to you as a new account. Second, there's a loss of employee loyalty. The minute you start flipping health plans around, it sends out a message of less security. Employees start thinking, "Hey, is there something going on I don't know about? Why do they keep changing the health plan? I just got used to this doctor." It inconveniences employees and undermines what you're trying to accomplish: the understanding that you are safeguarding part of their financial security.

Q: So what can you do?

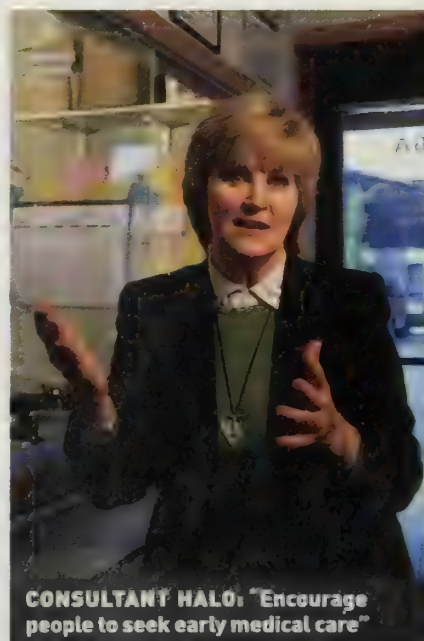
A: There's lots of good information about health

resources within a community—toll-free numbers and local offices. Make that available. Encourage people to seek early medical care when they have a problem—a philosophy and a policy that says, if you're not feeling well, get an early diagnosis rather than waiting, which could cost more money to treat and cause longer absentee time and more turnover. Then look at programs that can be brought to the workplace through public sources. They may have mammography, cardiac

screenings, diagnostic programs, and educational services you can arrange. Bringing a mobile unit to a workplace is good not just for the employee. It helps reduce the cost of your health plan, because eventually, if you have very adverse experiences, it's going to catch up with you in higher premiums—not to mention the lost work time.

Q: You've also suggested unusual actions, such as putting healthier foods in vending machines. Will that really make a difference?

A: I think it will, if employers encourage healthier snacking and lunch times, and urge employees to be less sedentary. I've seen the difference in health claims and overall attitude about being at work. This is the type of program that shows a payback.



CONSULTANT HALO: "Encourage people to seek early medical care"



Learn more about cutting health-care costs. Click Online Extras at frontier.businessweek.com



These lucky employees have discovered that there is such a thing as a free lunch—and pilot lessons, and college tuition, and pet care.

by Lesley Alderman

And we'll EVEN Throw In...



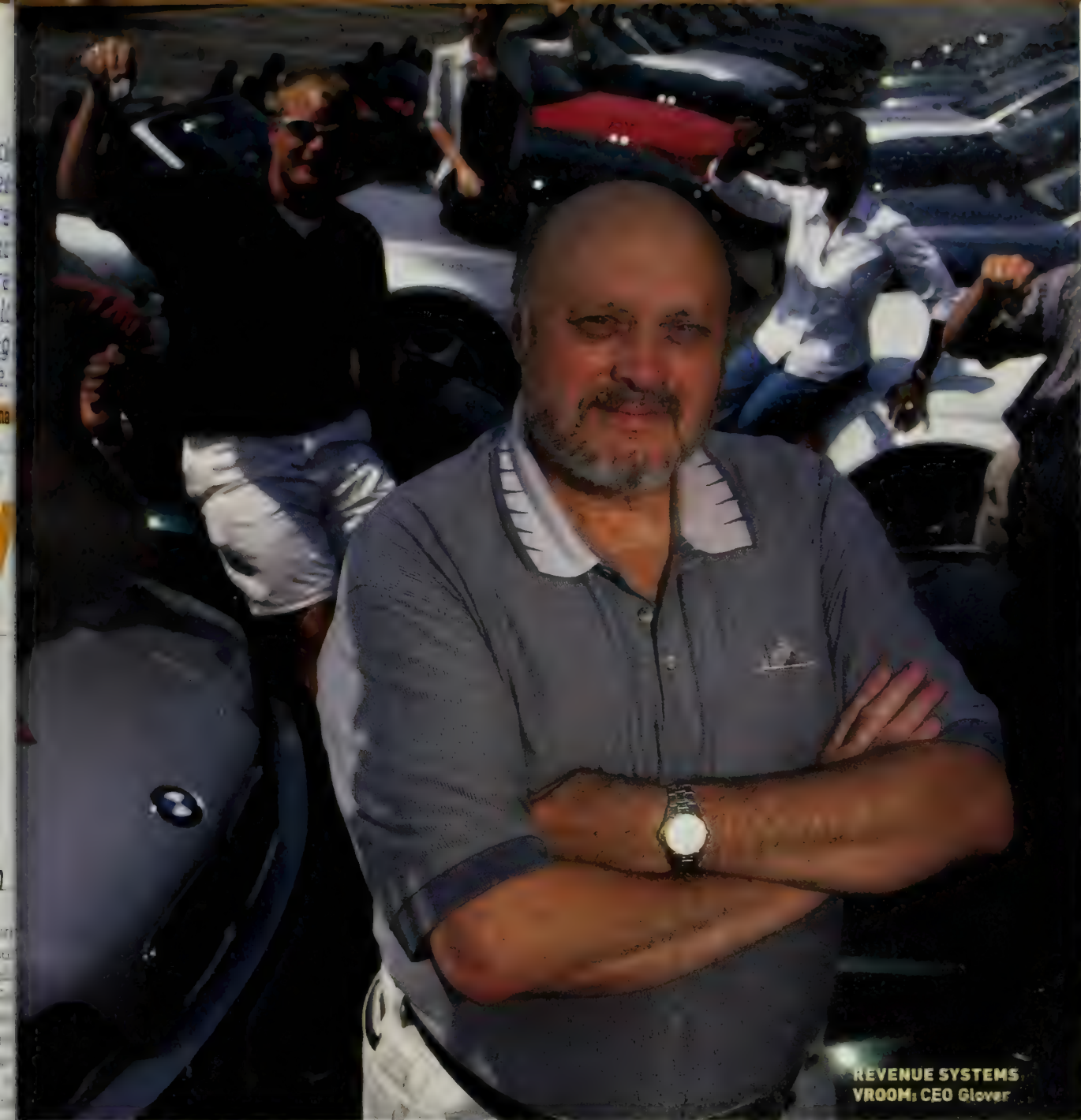
"BEYOND GENEROUS":
Neal and daughter Heather

Children's College Tuition

Onstott Group

Helen Neal was prepared to foot the entire \$23,000 tab for her daughter Heather's senior year of college. "This was our last year of tuition bill and my husband and I were thinking, 'Thank God this is over,'" says Neal. Enter her employer, Onstott Group, a 15-person executive search firm in Wellesley, Mass. This summer, Onstott announced that it would grant \$5,000 a year to workers with kids in college to help pay for tuition. The only criterion: The student must maintain a B average. "It was such a pleasant surprise," says Neal, Onstott's office manager, who has been with the company for more than a decade. "It was just beyond generous."

Managing Director Joseph E. Onstott says, "As a retained search firm, we know the power of perks. We also know that people work in companies because they want to." Onstott's aim was to both help his workers and instill positive ideals. "We looked for benefits that would be of real value to our employees," he says. So far, Heather Neal is the first recipient. By the year 2005, the company could be shelling out grants to as many as nine students. "Small companies used to be behind the curve on benefits," notes Onstott. "Now everyone is realizing that in today's competitive market, you have to fight to keep the best people."



REVENUE SYSTEMS
VROOM: CEO Glover

Free Beemers to Drive

Revenue Systems

The parking lot of Revenue Systems Inc. (RSI), an Atlanta software developer, is often mistaken for a BMW dealership. That's because virtually every car in the company's lot is, well, a BMW. The company gives beemers to all its 60 full-time employees. That's right: gives. When employees are hired, they are required to sign up for a leased z3 roadster or 323 sedan. The cost to the worker is zilch; the company pays for the lease, insurance, and taxes. The reason for the largesse—which comes to \$30,000 a month for the company? "In Atlanta, there are over 500 software developers," says RSI Chief Executive Bill Glover, who came up with the BMW idea. "It's hard for any company to stand

out from the crowd." And attract the employees it needs.

Last year, Glover was paying a headhunting firm \$50,000 a month to find new hires. Trouble was, the hunters were only turning up three workers a month when RSI needed five. "Every month, we were falling behind," says Glover. Then the savvy CFO introduced the BMW perk. Once the news hit the press last July, the company was flooded with résumés. Now no more headhunting costs. And lots of happy employees. Says Glover: "Our workers feel special, like they are members of an elite club." Plus, it costs less overall to lease the cars than to pay the headhunters. A benefit to all.



FREE TREATS:
Kron's Danzansky
(center) with employees

Free Food

Kron Chocolatier

Work is sweet for employees at Kron Chocolatier in Aventura, Fla. In addition to all the chocolate they can eat, workers are treated to a free lunch each day, a cake and a \$25 gift certificate on their birthday, and a honeymoon cruise when they get married. Owners (and sisters) Nancy Kasky and Cobbie Danzansky (pictured) subscribe to the what-goes-around-comes-around theory of work and life: "If you are nice to people throughout your life, it all comes back to you," says Danzansky. And how. Turnover at the store is remarkably low. Some work-

ers stay 10 years or more and even bring their children into the fold. Plus, business is brisk. The pair opened their first store in Miami Beach in 1982, later moving to Aventura. "We were just two housewives with no experience. Our husbands thought we would last only a year," the sisters recall. In 1986 they opened a second spot in Atlantic City. Now, the stores employ 30 people, who keep busy creating unique chocolate gifts for cruise lines, corporations, hotels, and casinos. It's a sweet confection for both owners and their workers.



**SOMETHING TO
BARK ABOUT:** Adams
Haberdashery workers

Pet Health Care

Adams Haberdashery

When you're a small specialty retailer, it's tough to compete on perks. So what do you do? If you're Joe Savino, president of Adams Haberdashery, a high-end clothing store in New Providence, N.J., you offer novel benefits—like a pet-care program. "I can't offer stock options and pension plans," says Savino. "So I try to find benefits that are within my budget." Until recently, that meant bonuses and clothing discounts. This year, he added Pet Assure, a discount club for pet owners in Dover, N.J., which costs him just \$59 a year for each enrolled employee (www.petassure.com). Members get 25% off vet bills and up to 50% discounts on certain pet supplies. "It's a terrific idea," says bookkeeper Adrienne Smozanek, who has three cats. Savino is just as pleased. "Employees tend to take benefits for granted. But this one was so unique they stopped to talk about it."



"COME FLY WITH US":
Sullivan pilot-employees

Flying Lessons

Sullivan Higdon & Sink

Employees work smarter when they know their subject matter inside out. That's the thinking at Sullivan Higdon & Sink, a Wichita (Kan.) advertising agency that counts aviation giants Cessna Aircraft and Rockwell Collins as its main clients. So, two years ago, the firm began offering its employees flying lessons. Gratis. The \$4,000 perk is available to all 90 employees, with preference given to those working on aviation projects. "This shows our clients we're not just communication people, we're airplane people," says CEO Joe Norris. Only three to four em-

ployees can enroll in the licensing program each year. So far, six employees have received their licenses. The program has been such a success that the company bought its own Cessna 172 and leased a Cessna 182. Now, the staff's pilots can fly to client meetings or check out a plane for a weekend spin. Rick Kaufman, a senior art director, says the experience has made him a better designer: "Now, I see the way pilots do." Says Norris: "This makes us an attractive place to work for airplane lovers. And that's who we want in our company."



A DOG'S LIFE: CEO Rathblott brings his pet to work and allows his staff to do the same

WHATEVER Workers Want

Unusual perks are de rigueur in Stamford Conn., where labor is scarce indeed

by Diane Brady

HERE IN FAIRFIELD COUNTY, Conn.—a virtual ground-zero of the full-employment economy—you can find a six-pound toy poodle named Ginger seated at the conference table of Norwalk's ERC Dataplus Inc. True, her seat is the lap of CEO Paul Rathblott. But Rathblott is just setting an example. He wants the consulting firm's two dozen employees to know he really means it when he says they should feel free to bring pets to work. Or set their own hours. Or work from home. Because if Rathblott doesn't offer such perks, someone else will—like the recruiters who call his director of organizational research at least once a week. "It's a seller's market out there," laments Rathblott, and pay alone won't make disgruntled people stay. "I





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just makes them better-paid unhappy employees."

What is true for the nation, where unemployment now averages 4.2%, is doubly true for Fairfield County, an affluent area rich in corporate headquarters that sits next to the booming Manhattan job market. The region has plenty of experience with tight labor markets and the need to

dangle incentives to attract workers. Historically, its employment rate has always hovered around 4%, thanks to the high number of white-collar workers and professionals who reside in its leafy neighborhoods and commute into New York.

But there has never been anything like this. Unemployment stands at 2%. Radio stations crackle with ads from fast-food restaurants desperately seeking employees. Billboards that once advertised products are now pushing entry-level positions around the Stamford area. One company is contemplating an airplane banner to woo people sunning themselves on the beaches—no doubt on weekdays, and with their employer's blessing.

Everyone has a story. Scott J. Kuppersmith

recalls how EDI USA Inc., a Stamford medical processing company where he serves as controller, used to get up to 100 résumés for every position it advertised a few years ago. "Now we're lucky to get three," says Kuppersmith, who has two employment agencies trying to fill a vacancy at the 20-person company. So far, the search has yielded only one résumé, despite the fact that EDI can toss out the one lure that seems to work these days: stock options (the company is planning to go public next year). Even with options, two employees started to leave a while ago, until EDI made an old-fashioned adjustment to their salaries and benefits.

Flexibility. So what are Fairfield County's small companies—those without stock options—doing to fight back? Many are trying to spice up job descriptions, offer hefty incentive packages, and generally bend over backward to make sure their employees stay happy. The flexibility Rathblott provides his workers is something now offered throughout the area as a matter of routine. At John S. Herold

Inc., a well-known oil-and-gas research company with a staff of 40 in Stamford, one analyst works from 4 a.m. until noon. "He just feels like a shrug," Executive Vice-President Christine Juneau says. The company has also paid to equip a number of home offices and reimburse employees' tuition.

Of course, there's no getting around the fact that companies with 40 people can't offer a conglomerate's range of career options. For Juneau, one remedy is to make jobs more fluid and interesting. That's especially true for lower-level employees, who may jump ship for slight increments in salary or opportunity. "We work to make sure these aren't dead-end jobs," says Juneau, who tries to bring support staff in on analytical work or other projects. She also encourages employees to get more training by not only paying for courses but restructuring schedules to fit class times.

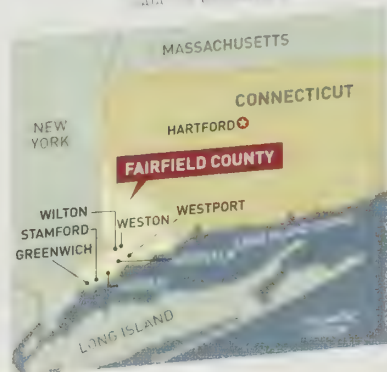
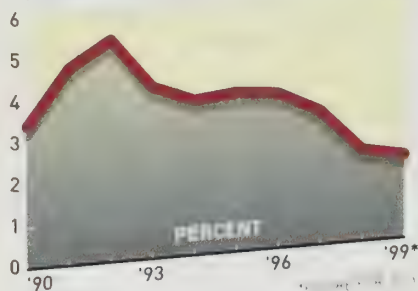
More than Money. Does any of this really matter to employees? You bet. Just ask 28-year-old Kristen Brown, an assistant office manager at Transmochem, a 13-person petrochemical trading company in Darien, Conn., that is a division of New York's Transammonia Inc. While many of her friends have chewed their way through several employers in the past four years, Brown stays put. Not only is her employer reimbursing her part-time MBA studies at Western Connecticut State University but she can arrange her schedule to attend classes. "A lot of my friends don't have that flexibility," says Brown, who says they keep switching for higher pay as a result.

Perks are only part of the solution. What many employees really want these days is an enjoyable atmosphere and a feeling that they're making an impact in their jobs. Buoyed by healthy paychecks and the knowledge that they can easily find new work, many are asking more about co-worker personalities and the prospects for promotion when interviewing with new employers. Money alone tends to be lower on the list. That was the case with a junior executive at a local online consulting firm, who recently left for a rival. "I didn't feel like I was doing something that mattered," she says of her old employer. So she began chatting with the competition. Her decision to quit was greeted with surprise—and offers of more money. "They just didn't get why I wanted to leave," she said.

It's hard to match a steady feeling of excitement. Susan E. Cifelli left her job as a middle manager at Bell Atlantic Corp. to become the executive vice president for marketing and sales at mPhase Technologies Inc. in Norwalk. Although the two-year-old Internet access company offers stock options, generous vacations, and spontaneous bonuses, novelty appears to be the main draw. Cifelli finds the project's buzz and potential payoff more appealing than a steady career path at a big company. "We're doing something that no one else is doing," says Cifelli. "How can you really beat that?" As employers struggle to keep their own teams intact, that question no doubt lingers in their minds.

Nobody's Home

THE UNEMPLOYMENT RATE IN FAIRFIELD COUNTY, CONNECTICUT, ALWAYS LOW, IS NOW SCRAPING BOTTOM





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Invasion OF THE **Body** Snatchers

Headhunters can be costly, but in the war for talent, they are an invaluable weapon.



DAVID BOWIE WANTED IN. Fellow rock legends Todd Rundgren and Brian Eno were ready to record, too. No wonder high-tech entrepreneur Ty Roberts believed Ion Inc., his Berkeley (Calif.) startup, had arrived. Having pioneered a way to add multimedia to audio CD-ROMs, the future looked bright back in 1995. Time to staff up, Roberts figured. "We basically hit the street to pull in as many people as we knew," Roberts recalls. "Well, that maxed out at five people." So tiny Ion did what other hard-pressed small companies are doing: It called in the headhunters.

The company has been using them ever since. Although Ion's interactive CD-ROMs bombed and the company was bought out, the recruiters, now working for Ion's successor, continue to comb the Bay Area for database engineers and Web developers. How come? Because conventional methods just don't cut it in this tight labor market. "There's a war for talent going on in the economy," says James M. Citrin, a communications recruiter for Spencer Stuart in Stamford, Conn. Small companies feel its effects most intensely, and headhunters, once used mainly by big corporations, increasingly get called in to supply reinforcements.

Like any sophisticated logistics system, they're not cheap. Search consultants work either on a contingency or retainer basis. Contingency fees are the economy-class seats of headhunting:

A search typically costs 20% to 30% of **by Joan Oleck**

the annual pay of the person being sought, which is paid once the search is successfully completed. Some firms will take on searches for people making as little as \$40,000 to \$50,000 annually, so it's not unusual for a business to engage two or more firms in a quest for the best candidate. Retained searches, by contrast, cost a standard 33⅓% of the placement's pay package and focus on top-level jobs. A third of that fee must be paid up front, before you even know who the headhunters will come up with. That's why clients engage one retainer firm at a time and—if they're smart—monitor the recruiter's out-of-pocket expenses and progress closely.

What's the arc of small-business activity in either category? Contingency searches have always played a role at small companies because they often lack a human-resources staff. But

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Harold Bixbee Esq.
Goals:

there has been a sharp surge in retainer work, say industry insiders like Peter M. Felix, president of the Association of Executive Search Consultants, and recruitment consultant Christopher W. Hunt of Hunt-Scanlon Advisors in Stamford, Conn. Much of the new business comes from high-tech startups awash in venture capital and also able to offer headhunters stock options in lieu of cash. Fully a quarter of Spencer Stuart's 4,000 annual searches are vc-backed startups, Citrin says. Adds Theodore B. Martin Jr., CEO of Martin Partners in Chicago: "The criteria isn't really 'small vs. big business.' It's market cap."

To be sure, the rising use of search firms by small companies is due to more than just the tight labor market. Recruiters cite time pressure, especially at high-tech companies. "Headhunters are taking on more functions of human resources," says Roberts, now chief technology officer at Ion's parent, CDDB Inc. "The most valuable commodity we have here is time." Habit plays a role, too. When corporate types jump from big companies into tech startups, they're calling recruiters simply because that's what they've always done.

Of course, your business may have no corporate types on board. You may not be in the high-tech fast lane. And you may not have \$100 million in revenue. But that doesn't mean you're priced out of

How Do You Choose a Recruiter?

- ◆ Identify potential firms through groups such as the Young Presidents' Organization. For retainer firms in your area, check with the Association of Executive Search Consultants (www.aesc.org)
- ◆ Draw up explicit criteria for the job you want filled.
- ◆ Look for firms specializing in the job category you're filling. Obtain references.
- ◆ Find out if the firm has worked in your industry, and for how long.
- ◆ How many similar positions have they recruited for, and what were those candidates' retention rates?
- ◆ How long did it take the firm to identify the talent that was placed?
- ◆ How many potential candidates is the recruiter blocked from touching because of the off-limits rule (which prohibits reputable headhunters from recruiting people they've placed, for up to two years).
- ◆ How will the recruiter set about understanding your company's culture and skill requirements?
- ◆ What steps will the recruiter take to keep your search a priority?



NO MORE PALS: Ty Roberts "maxed out" after hiring five people for his software company and then went to a search firm.

the market. Take Barry A. Rosenberg, CEO of Econo Corp., in Hicksville, N.Y. He recently hired three contingency firms to fill an operations manager slot for his \$40 million, 100-employee company, which makes retail store fixtures. Rosenberg says his search firms aren't "Spencer Stuart stuff," just "a woman and a telephone." The winner: Corporate Search Inc., of Syosset, N.Y., which took three months to come up with the right person. The cost: \$16,000, far less than a national firm might charge.

Some of these boutique firms will even bargain, a little-acknowledged fact in the search industry, confides Citrin of Spencer Stuart. Hunt says some firms charge 25% fees in return for a guaranteed block of four or five assignments. Citrin suggests using a "hybrid retainer" firm, which for a \$150,000 search, might ask \$15,000 down and \$35,000 later. And specialized recruiters are simply going on the clock. In Roswell, Ga., an Atlanta suburb, Smith James Group Inc. has discarded its 33 1/3 fee in favor of a \$125 hourly rate, with nothing extra for multiple hires. "It gives small companies an option to have quality work," says CEO R. Michael Smith, who adds that caps on fees can also be negotiated.

Jack Dayan, who runs a local telecom exchange carrier, Plan B Communications in Shrewsbury, N.J., found another way. In the days before his company had investors, CEO Dayan was so strapped for living expenses that he worked at a flea market on week ends. Yet he still managed to hire a retainer firm. How? By making his deal contingent on his first round of financing. Accounting and legal help came via the same route.

However you pay for a search, it's expensive enough to make you stop and ask whether you need help at all. Beverly Lieberman, president of Halbrecht Lieberman Associates Inc. in Stamford, Conn., describes her typical search client as one

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"ready to invest in some bench strength around the management team." Judy B. Homer, president of J.B. Homer Associates Inc. in New York, explains that growth often prompts the need to upgrade accounting and marketing systems, and to add e-commerce, which might require a chief technology officer. That's when you discover that maybe your great hands-on tech guy can't even spell "cto," let alone act like one.

Recruiters can help in pay negotiations—the touchiest part of the hiring process

So you start your search with some do-it-yourself strategies, like newspaper ads and Internet services. Prepare for an earful from recruiters listing all the pitfalls. Much of it is self-serving, but they get your attention with their argument that your ideal candidate might not be job-hunting at all. That's where recruiters can help; the best ones are plugged into the industry and can network their way toward candidates you had never heard of or might not be able to reach—including people working for your rivals. Homer adds that a good recruiter not only knows how to locate talent but also how to interview it. If you think a router is a very big drill bit,

you probably wouldn't pick the best chief technology officer on your own.

Recruiters can also act as buffers during compensation negotiations. This is often the touchiest part of hiring. The fact is, chief executives at the average company might have no idea what some specialists are worth—and they're in for a shock. "To get a chief technology officer of any class, they're going to have to pay almost as much as they're paying the president," Lieberman says.

What can go wrong? The obvious fear is that your fabulous new hire will be re-recruited. It could happen, but not by the same headhunter. The profession has a rule that forbids re-recruitment from client firms. A more realistic concern is that your recruit turns out to be a dud. Retainer firm contracts guarantee another placement if anything goes wrong the first year; contingency recruits will usually refund your money.

An even worse problem: The search firm itself is a dud. In fact, anywhere from 20 to 25% of searches don't result in a hire, Hunt says. Ma Willner, CEO of Colorado MicroDisplay Inc., a 4-employee Boulder-based maker of displays for viewfinders and digital cameras, says he's one of the horror stories. The two retained search firms he has used in his odyssey for a sales vice-president

"just haven't delivered," he says. The first search firm took his \$50,000 up-front payment, then "pushed a lot of paper our way, gave us a lot of résumés," but "didn't take the time to come in here and understand our needs, our culture." A second, which ended up keeping half the fee, wasn't much better. MicroDisplay ultimately filled the job itself.

When problems crop up, recruiters say they aren't always at fault—and some point to the client. "He may not have provided a clear strategy to the search firms; that's common with entrepreneurs with a lot of money," Hunt says. Nevertheless, AESC President Felix says recruiters ought to push clients to restructure a slow when it's not working out and tell them bluntly: "The best people wouldn't touch this job as currently described." But sometimes, the chemistry or family circumstances or the personal preferences don't work out. "One thing a search firm does is increase the odds of hiring good people; it doesn't guarantee it," says Michael Eckert, CEO of Video Networks in Roswell, Ga., a 70-employee company that digitizes video. He should know. Eckert is using a headhunter right now, and is himself the product of an executive recruiter. In his case, at least, headhunting has turned out to be a heads-up tactic.



COMPUTERIZING? Judy Homer says good recruiters can provide expertise when you're interviewing in an unfamiliar field



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Put Me In, Coach

It may sound touchy-feely, but a business coach can help you succeed in business—and as a person

BY ROBIN D. SCHATZ

LIFE AND BUSINESS RARELY maintain their proper distance from each other. Work and family concerns compete for attention; there never seems to be enough time to do everything we want. And, often, our passions lurk just behind the office door—or, in my case, in the top desk drawer of my cubicle. Sometimes when I forage there for a paper clip, a sparkly necklace or a stray earring spills out—the jewelry creations of a hobby gone wild.

Why the confession? To explain why I spent part of my summer vacation with “success” coach Barbara McCrae, owner of EnhancedLife Coaching in Colorado Springs, Colo. I’ve contacted her to learn why a growing number of entrepreneurs are hiring business coaches to help achieve their personal and business goals. And, I admit, I’ve been secretly wondering if coaching could help me turn my hobby into a bona fide business.

“It’s not just helping the entrepreneur with hard-core business issues but also helping them with their personal issues,” explains McCrae, a former corporate human resources executive and one of about 10,000 coaches working worldwide, according to the International Coach Federation, a professional group. In practice, this holistic approach means McCrae will help you write your business plan, but she’ll also help you figure out how to take a day off.

When we meet, I note McCrae is cheerily clad in shocking pink—and has a perky personality to match. But most of her clients never meet her face to face. Instead, they get “telecoached.” Explains McCrae: “We don’t get distracted by the visual cues. We’re total-

ly focused on the content.” Clients pay her \$400 a month for weekly half-hour phone sessions, plus unlimited faxes and e-mail.

Many of McCrae’s clients are launching new ventures. Barbara F. Campbell, a successful but unfulfilled art gallery owner in Cleveland, sought McCrae’s help to start a new business, Basia Jewelry Designs. Over an eight-month period, McCrae and Campbell talked



weekly. McCrae gave her exercises to define her goals and values; she helped Campbell overcome a creative block. Campbell, who calls coaching a “turning point,” now sells to Cleveland galleries and boutiques and hopes to hire her first employees shortly. She still gets coached by McCrae occasionally. “Even though my business is going well, I sometimes run into a little problem. She doesn’t solve it. She sort of guides you and shows you that you have it within you to solve it,” says Campbell.

Men tend to bring McCrae more concrete business dilemmas. Jeffrey Hughes, CEO of Internet startup Rez-

Logic Inc. in Colorado Springs, which sells a Web-based database program to manage prospective hires, got coached by McCrae to improve his sales skills. In a helpful role-playing exercise, McCrae had him imagine the customers as a “real person with a family and a life,” he says.

Now, I’ll concede, coaching sounds awfully touchy-feely, and it’s clearly not for everybody. During my same coaching session with McCrae, we talked about how I’m daunted at the prospect of making my jewelry business official. She tells me about setting up a Web site and registering a business—pretty standard stuff. But then she zeroes in on what’s really bothering me: “Let’s look at your recipe for dealing with fear. How do you do that?”

Okay, so this may sound a little hokey, but I actually do find it’s a useful question.

I tell McCrae how I recently overcame jitters about appearing on TV by getting some on-camera training. Aha! I realize I don’t yet feel competent in this unfamiliar industry and will need to educate myself. Profound insight? Perhaps not, but McCrae’s questions lead me to think more deeply about what’s holding me back. What next? She’d have me complete a mini-business plan, name and register my business—

other words, just do it. “Many times the fear about whether this is going to be a viable business is because you haven’t fully committed to the next step,” she says.

And that’s true. I have no plans to quit my day job, but I’m still thinking about that name. As for coaching, having someone listen to you and encourage you, and break everything down into easy, concrete steps, is rather nice. It sure beats talking to the mirror.

Schatz, a small-business editor, can be reached at Robin_Schatz@businessweek.com

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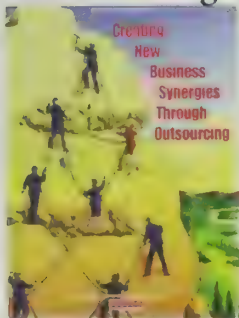


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Rock 'n' Roll Is for Kids

Gen Xer Tripp Rackley finds stardom in banking software

Tripp Rackley was headed for a Gen X dream job: rock star. His college band, Mercy Me, headlined raucous shows on college campuses across the South. But after graduating from the Georgia Institute of Technology in 1992, Rackley sensed an impending cultural shift: that computer whizzes, not musicians, would be the rock stars of the 21st century.

Rackley, now 29, first landed at a financial technology firm, helping banks automate their labyrinthine back-end operations. By 1995, Rackley, who first used the Internet in 1992, had divined the wired future. He would build Net-based software that linked consumers directly to banks—letting them check balances, pay bills, and make transfers between accounts.

With three Georgia Tech buddies, Rackley founded Atlanta-based nFront in mid-1996. His pals did the programming, while Rackley tested his pop-star persuasion on risky bank presidents—most of them twice his age. Soaking up \$20,000 from Rackley's personal savings, nFront strug-

gled to land bank customers amid consumers' concern about financial privacy on the Net. The first client came late 1996, but it was still a battle. "People would look at nFront like I was a nutcase," says Rackley, his hair already turning a dull salt-and-pepper gray.

Some nutcase. As the Net took off and consumers' fear receded, banks clamored to offer Web transactions. nFront's \$3 million venture-capital boost came in 1998, helping Rackley woo 40 clients that year. Each typically paid \$50,000 in startup costs, and \$2.50 per online user per month.

The numbers zoomed in 1999. More than 160 small banks, and 33,000 customers, now use software from the 120-employee nFront. Despite revenues of just \$5 million and a raft of new competitors, a June public offering netted nFront \$32.5 million, while Rackley's share has risen to \$40 million. "I would rather be an entrepreneur than a rock star," he deadpans. "I like the challenge." Hey, it's on rock 'n' roll.

—DENNIS BERMA

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COMMENTARY

By Paul Raeburn

LEGAL WRANGLING WON'T RESTORE THE RAIN FOREST

In 1964, Texaco Inc. joined Ecuador to develop an oil field in a sparsely populated region called the Oriente, in the Amazon. Texaco pumped 1.2 billion barrels of oil out of the Oriente before pulling out of Ecuador in 1992.

A year later, attorneys filed a U.S. class action on behalf of indigenous tribes and others in the Oriente. The attorneys claimed Texaco had left behind stinking pools of petroleum and toxic wastewater, ruining their land and threatening their health. The suit claims Texaco engaged in harmful practices it wouldn't have dared to use in the U.S.

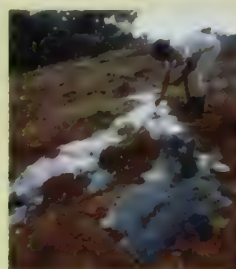
"The rain forest stopped being able to sustain tribes that had been there for centuries," says Steven R. Donziger of New York City, one of the attorneys who filed the suit. Donziger and his colleagues see the lawsuit as a step toward better policing of American multinational corporations, ensuring that they do not take advantage of weak governments or legal systems abroad. Critics of such lawsuits contend that they would clog American courts with business that ought to be handled in the countries where the alleged offenses occurred. In this case, for example, the Ecuadoran government surely should share the blame for any damage that might have been done.

FOOT-DRAGGING. Texaco spokesman Chris Gidez says the company's operations in the Oriente "used internationally accepted practices and complied with all Ecuadoran government laws." He says the company also agreed to clean up 250 sites, at a cost of \$40 million, and the Ecuadoran government released it from further obligations.

The questions at the heart of the suit are simple: Did Texaco leave a mess behind? And if so, should it be forced to pay for the environmental and health damage it has caused? The sixth anniversary of the lawsuit is coming up in

November, and the parties are probably years away from settling those questions. They're still battling over where the trial should be held. And the losers in this sadly familiar tale of legal foot-dragging are, of course, the nearly powerless residents of the Oriente.

Both sides in the dispute are contributing to the delays. Texaco has repeatedly moved to have the case dismissed from U.S. courts, arguing that Ecuador is the place to settle the matter. Donziger and his colleagues say Texaco has moved to have the case dismissed six times. Only once was the motion accepted, and that decision was reversed on appeal. The sixth motion to dismiss is pending. "We've said we're ready



RUINED LAND: Oil spills have damaged the Oriente region, plaintiffs say



DRAWN-OUT DISPUTE

1964 Texaco is invited by Ecuador to develop an oil field in a 200-square-mile portion of the Amazon known as the Oriente.

1988 Texaco completes remediation of 250 sites at a cost of \$40 million. Ecuador releases Texaco from further obligations.

1992 Texaco pulls out of Ecuador.

1993 Residents of the Oriente file a class action against Texaco.

1999 Parties await decision on whether the case should be tried in Ecuador or the U.S.

DATA: TEXACO; PLAINTIFFS' ATTORNEYS

to stand trial in Ecuador," says Gidez.

The only problem, say the plaintiffs, is that making their case in Ecuador would be virtually impossible. "If we sued in Ecuador, we couldn't compel the Texaco witnesses to appear, couldn't get their records, and couldn't collect on a judgment," says Joseph C. Kohn, a lead attorney on the suit. Ecuador bars class ac-

tions, and as many as 30,000 individual suits could go to a single provincial court judge, Donziger says.

While Texaco has been churning out motions to dismiss, the plaintiffs' attorneys also have done their part to complicate the case. Instead of focusing solely on the environmental damage done and the remediation needed, they've added two additional factors. First, they're blaming Texaco for what they say are high cancer rates in the Oriente. "This is a potential medical disaster," says Kohn. Maybe so, but demonstrating that will be next to impossible in a remote area with little access to health care.

Second, the plaintiffs are now charging that Texaco's actions in Ecuador are an example of environmental racism. They are vowing to launch an advertising campaign in the U.S. that will say Texaco "is an example of a company that does not care as much about people of color as it needs to," says Donziger. Both claims shift the focus away from the central issues: whether Texaco is responsible for polluting the Oriente and whether it should clean up the mess. Both sides ought to end their legal posturing and get on with the case. The seemingly endless maneuvering serves no one.

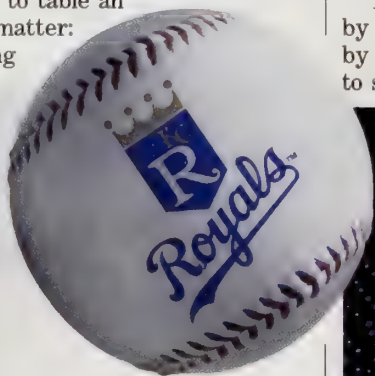
Raeburn is BUSINESS WEEK's senior editor for science and technology.

BASEBALL

AND THEN THERE WERE 28...

Is a smaller league the answer to baseball's economic woes?

Major League Baseball owners have a record of *mañana* meetings—putting off today's business until tomorrow. So few eyelids opened when the Lords of the Diamond left a meeting in Cooperstown, N.Y., last month after voting overwhelmingly to table an important matter: long-pending



sales of franchises in Oakland, Calif., and Kansas City, Mo.

This time, though, baseball owners may be just warming up for one of their most daring plays: eliminating two—or as many as four—franchises. In an era when most leagues are plotting further expansion, baseball is talking seriously about shrinkage.

"The game of baseball is alive and well, but the business of baseball is in fairly desperate straits," warns San Diego Padres President Larry Lucchino, who calls eliminating some franchises "a very appropriate subject of debate." Thomas O. Hicks, who bought the Texas Rangers last year, says that "over half, certainly" of the 30 team owners are genuinely interested in downsizing.

"REALITY." Just raising the issue can send shock waves and stir conjecture about hidden agendas. Is it an opening salvo in negotiations with the Major League Players' Assn.? A call to communities to build ballparks for endangered teams? "I don't think it's a message—it's reality. Baseball is having problems, and what baseball can't do is stick its head in the sand," says Hicks.

At the top of the hit list are the Oak-

land A's and the Montreal Expos, small-city franchises that draw puny crowds. A second tier includes the Kansas City Royals and Minnesota Twins. But they seem less vulnerable. Even if contraction happens, one owner says, "it won't be more severe than two teams."

The proposal is under consideration by a blue-ribbon task force appointed by Commissioner Allan H. "Bud" Selig to study the economic health of baseball.

means larger slices of revenues for the 28 franchises that would remain. Owners of large-market teams also see relief from a dreaded obligation: revenue sharing. Baseball's richest franchises could subsidize the poorest. Zapping small-market also-rans rubs out "the neediest and most demanding of the revenue-sharing payees," notes Lucchino.

Downsizing has its perils. "There are some people who would view it as a



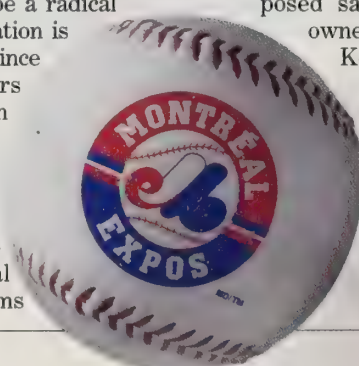
A PIN DROPS IN OAKLAND: Empty seats as the A's struggled for a playoff berth.

The panel, which includes former Federal Reserve Chairman Paul Volcker and columnist George F. Will, is expected to issue a report next year.

Lowering the number of franchises from the present 30 would be a radical step. In baseball, even relocation is taboo—no team has moved since 1971, when the Senators skipped out of Washington for Arlington, Tex. But baseball owners are restless for solutions to their economic woes. In consolidation, owners at both ends of the revenue scale see a financial boon. Having fewer teams

feat for baseball to be leaving some teams," acknowledges Peter Magowan of the San Francisco Giants. And the cost of buying out departing teams. Before MLB took the air out of the

posed sale of the A's, owners Steve Schott and Ken Hofmann had a deal to sell the franchise for \$10 million. I



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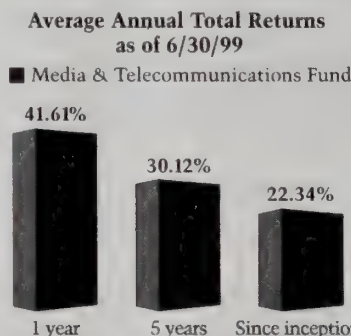
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consolidation scenario, owners of the remaining teams might be called on to pay market price. "That way the [outsider] owners wouldn't be getting a raw deal financially," says the Padres' Lucchino.

Eliminating franchises has one obvious flaw, note critics. It doesn't solve baseball's underlying problem: the wide, and widening, gap in the amount teams collect in local revenues. Consolidation would be "absolutely disastrous," says Smith College economics professor Andrew Zimbalist, who has been a consultant to the baseball players union. "It's not a long-term solution, not a friendly solution, and isn't an economically efficient solution from the standpoint of the game's public relations."

Behind the closed doors of baseball's task force, downsizing has been a topic for months, however. The buzz reached Oakland, but few took it seriously. MLB officials and local business leaders who attended MLB meetings in Cooperstown last month confident the team would change hands. They left ashen-faced. Selig explained the delay saying owners needed to hear the task force recommendations before deciding on the plan. **WARINESS.** "If they're saying our community isn't good enough to be part of the program, say it, man to man, everybody's eye. But don't string us along," said Robert C. Bobb, Oakland's city manager. "There's all kinds of conversations in respect to lawsuits and congressional hearings. In the end, if they decide to take this step, it will be very difficult to turn it around."

There's a wariness in other small cities, too. On Nov. 2 in St. Paul, Minn., voters will decide whether to approve a sales-tax hike to fund a ballpark for the Twins. Balloting won't be affected by the discussion of downsizing, says Mayor Norm Coleman. But he says the city has already been bruised by years of talk that the team might be moved unless a new park is built. "When you get people's ire up like that, that's the death knell of public support," he says.

Consolidation isn't about bullying tactics, insist some owners. It's about saving some of business. "The media players association—they tell us to stay at home and solve our problems," says Lucchino. "This is one way to do it."

If there was any question that there is a problem, evidence could be found in Oakland three days after the Cooperstown meeting. Barely 6,500 fans showed up to watch the A's play on a Sunday afternoon—even though the plucky team was in a surprising fight for a spot in the playoffs.

By Mark Hyman

The name is new.
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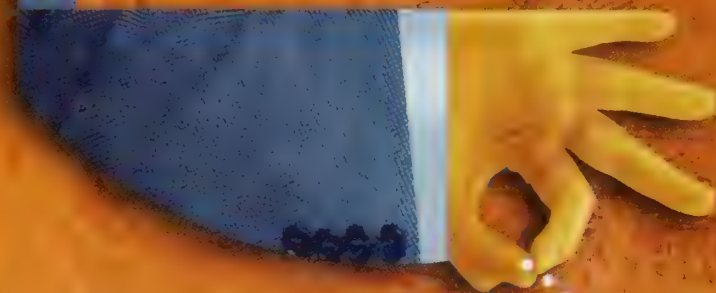


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DIALING FOR PENNIES

Upstart telecoms are outwitting the old national cartels. The result: a surge in competition worldwide—and even free international calls

Howard Jonas, the CEO of telecommunications company IDT Corp., still remembers the day in 1993 when a colleague from Saudi Arabia called to say that Saudi troops were at the door. "Don't let 'em in," Jonas told the panicking man. The soldiers broke down the door anyway and grabbed IDT's telephone equipment, shutting down its local operations. The Hackensack (N.J.)-based company had been running a service for six months that let Saudis call abroad for far less than official rates—a move that took cash out of the coffers of the national phone monopoly. A few weeks later, Jonas got some of his equipment back and was able to start operating again. But the incident put him on notice: The world's telephone monopolies would do anything about anything to protect their cash cows.

Such are the stakes in the \$60 billion business of international phone calls. For decades, carrying phone calls across national borders has been dominated by monopolies that fiercely guard their right to charge sky-high prices and rack up huge profits. You want to call Russia from the U.S.? In 1996, you coughed \$1.75 a minute. Pakistan? It was a minute, one of the highest rates in the world. Everybody cleaned house—from AT&T and British Telecommunications PLC to India's VSNL and Senegal's Sonatel. Everybody kept customers, of course.

Now, the century-old rules of the international phone cartel are collapsing. Spurred by more efficient technology, deregulation, and a dizzying wave of startup activity, the nosebleeds of the past are disappearing fast. Today when MCI WorldCom Inc. sends your call into Germany, it doesn't have to go to Deutsche Telekom to make the connection. Instead, it can choose from among 100 other companies, all trying to get business by offering ever-lower prices. And with phone service getting more efficient—and far cheaper—upstarts can now afford to operate private networks that go head-to-head with the monopolies. Tiny Bermuda-based RSL Commu-

nications Ltd., for instance, runs private telephone lines into countries around the globe to avoid paying the lavish fees those countries levy on public lines.

The result: Prices for international calls are falling toward their actual costs from the heights long dictated by fat and happy monopolies. In just the past three years, the average cost of an international call from the U.S. has dropped 25%, from 74¢ a minute to 55¢. In some parts of the world, fees already have plunged as much as 80%. A call from the U.S. to Britain, for example, runs 12¢ a minute, vs. 58¢ in 1996. And experts expect to see much deeper declines in the next three to five years. "Technology and competition are tearing down the old wall of monopoly, and it's happening faster than most people predicted," says William E. Kennard, chairman of the Federal Communications Commission in Washington.

NET PROGRESS. Now, even the fallen bricks could be swept away, thanks to the Internet. Free phone calls over the Net are possible today as long as they are being placed from a PC on one end to a PC on the other. Yet Net telephony remains just a tiny sliver of international traffic, mainly because the quality hasn't been up to snuff and the populace in many

countries has limited Net access. That's changing. As quality improves and the Net becomes more widely available, it will offer consumers a cheap alternative to existing phone service. More importantly, telecoms are tapping into this communications backbone by routing their calls over the Net. The combined effect will drive down prices even more. "The Internet and other things are dooming the whole machine," says Bertil Thorngren, adjunct professor at the Stockholm School of Economics and consultant to Swedish phone company Telia.

Indeed, as the entire international telephone system is revamped, dramatic change lies ahead. Countries that once protected their telephone monopolies with everything from strong-arm regulatory policies to armed forces will find that their cherished assets lack the scale to survive on their own. Expect

Special Report

more cross-border mergers like the proposed alliance between Sweden's Telia and Norway's Telenor. Even AT&T's alliance with British Telecom could foreshadow a merger of the two in the future. "When the system breaks, it'll become a free market," says Ameet Shah, a partner at Andersen Consulting. Then "those with the most volume will be able to turn that into a genuine competitive advantage."

They'll have to rely on more than just volume, though. Phone minutes are fast becoming low-margin commodities—and some experts believe voice calls could actually become free. As that happens, carriers around the globe will scramble for profits by offering whizzy new features like talking e-mail or "follow-me" services that let customers receive calls anywhere in the world on a single phone number. The combination of lower prices and fat-margin services should add up to big growth: By 2008, predicts telecom researcher Ovum Ltd. in London, the combo could double the volume of international calls to nearly 200 billion minutes a year.

How were such powerful international forces as monopolies and governments so quickly undermined? Credit deregulation—and, ironically, U.S. regulators. One of the most radical

changes to hit the telecom industry came from the FCC in August, 1997. The com-

mission—without negotiating with any other countries—decided to slash the so-called "settlement" fees that U.S. carriers pay foreign companies to complete calls from the U.S. These fees had been set under an international settlement system to compensate countries for handling each other's traffic—and for any imbalance in the volume. For instance, in 1997 U.S. customers spent 495 million minutes on calls to Brazil, but Brazilians made only 159 million minutes' worth of calls to the U.S. To pay for the deficit of 336 million minutes, U.S. carriers sent Brazil a cool \$154.7 million.

CUT-RATE TO KABUL. While some of the rates in the FCC's so-called Benchmarks Order took effect on Jan. 1 and others go into effect as late as 2002, the reductions already are having a big impact. Settlement fees often made up half the price of international calls, and the FCC's benchmarks are, in extreme cases, less than one-tenth of what foreign phone companies used to receive. For example, the \$2.83 per minute American phone companies now pay to send calls into Afghanistan will be cut to 23¢ in 2002.

Other countries were incensed at the FCC's decision. That's partly because its maverick move was the opposite of how things used to be done. For the past 134 years, since the era of telegraphs, countries have held painstaking bilateral negotiations to set what they pay for accepting incoming communications. After the FCC's move, a consortium of Latin American countries filed suit in the U.S. against the FCC, arguing that it was dictating public policy to other countries. Countries also are turning to the International Telecommunication Union, the Geneva-based body responsible for the settlement rate system, hoping it can negotiate a new multilateral approach. So far, the FCC has won every dispute.

The real reason for all the vitriol is money, of course. Lots of money. Because industrialized countries tend to initiate more calls than they receive, the settlement system resulted in a net transfer of billions of dollars from wealthier to poorer nations. Since 1985, U.S. carriers have paid out

When MCI sends a call to Germany, it can choose from among 100 telecoms offering ever-lower prices

some \$43 billion in settlement fees, including \$1.2 billion to China, \$1.3 billion to India, and a stunning \$7.6 billion to Mexico, according to FCC figures. Now, for the first time, these payments are steadily declining. Payments by U.S. carriers reached a peak of \$5.8 billion in 1991 and dropped to an estimated \$4.4 billion in 1998. U.S. payments likely will drop below \$4 billion this year.

That has put a squeeze on some developing countries. Many, telephone fees are the most- or second-most-important source of hard currency. In 1995, for example, settlement fees accounted for 100% of the foreign currency Cameroon received. And they've been a key means for countries to subsidize the construction and operation of their phone networks (page 108). India's international phone monopoly, VSNL, gets 37% of its \$1.6 billion in revenues from settlements. Because of the decline in such fees, Sri Lanka Telecom has had to double the price of a three-minute local phone call.



DIALING ABROAD

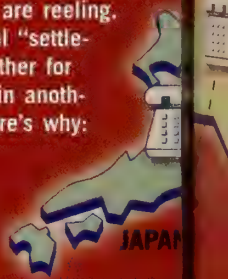
Spurred by more efficient technology, deregulation, and a dizzying wave of startup activity, the \$60 billion business of international phone calls has seen prices fall by as much as 80% in the past three years. That has been a boon for consumers, but telephone companies are reeling. For decades, they have relied on bilateral "settlement" agreements to compensate each other for calls that begin in one country and end in another. But the old way is crumbling fast. Here's why:

1 CALLBACK: THE SHOT HEARD 'ROUND THE WORLD

In 1991, a method emerged to get around high rates. Because long-distance calls from the deregulated U.S. were cheaper than calls to the U.S., startups took advantage of the gap, offering "callback services." A customer in Japan would dial a special U.S. number supplied by the service and hang up after a few rings, avoiding the charge for a call. Then, the U.S. number would call back and play a dial tone to the Japanese user. From there, the caller could dial anywhere in the world at low U.S. prices.

SAVINGS TO CONSUMERS: As much as 90% below typical national phone rates.

IMPACT ON THE PHONE COMPANIES: It cost non-U.S. phone monopolies billions of dollars in lost revenues. And it skewed global calling patterns, greatly increasing the number of outbound minutes from the U.S.—and helping drive up U.S. settlement payments by 63% from 1991 to 1997.



loss of revenues could crimp economic development, too: every phone line added in a poor country, its gross domestic product rises by \$2,000, according to a 1997 study by consulting firm McKinsey & Co.

Not that all that cash was invested wisely. Though settlements were meant to subsidize phone service and telecom construction, the money was often siphoned off to pay for other services or unrelated infrastructure projects. Indeed, in places that received the largest subsidies have done the least to upgrade their phone systems. "You can see that the money isn't always well spent in some countries," says James Alleman, a professor of telecommunications economics at the University of Colorado at Boulder. "Sometimes I think you're putting it in Swiss bank accounts or using it to buy yachts for government officials."

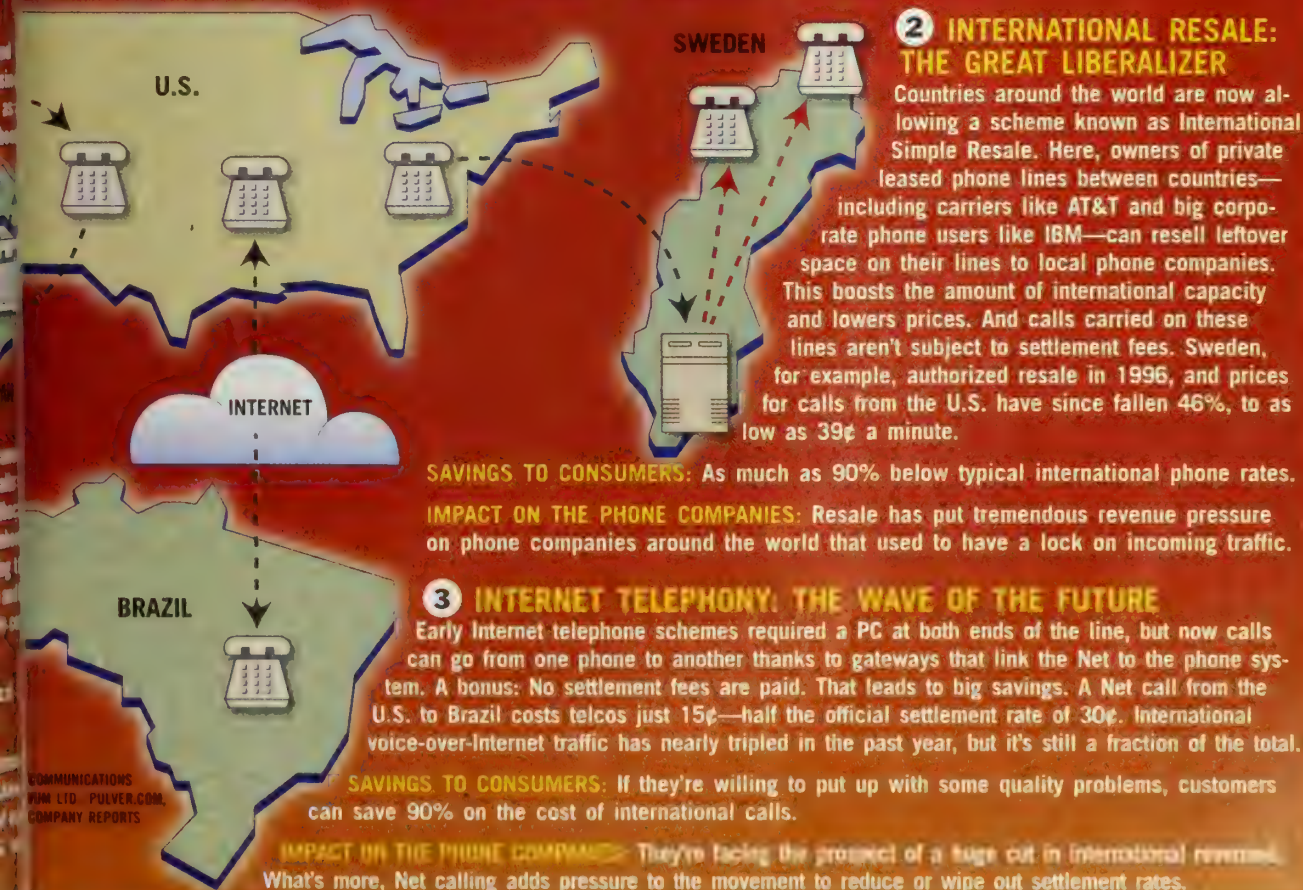
CALLBACK COUP. The real change goes far beyond cutting settlement payments. As competition emerges in countries around the world, the whole notion of a formal settlement fee is becoming obsolete. What's emerging instead is a vibrant market where dozens of competing companies negotiate directly with one another to link their phone systems, sometimes at no charge. Thanks to deregulation, 38% of international phone traffic now is completed for less than the benchmarks required by the FCC. "When you have competition on both ends of the line, rates come down to the public," says

Seth Blumenfeld, president of international services for MCI WorldCom. The cost of completing a call "is rapidly approaching the actual cost of providing the service."

To understand why the old international phone system is headed for extinction, rewind to the early 1990s, when the seeds of the revolution were sown. That's when opportunistic newcomers like IDT and Telegroup Inc. started offering inexpensive "callback" services to customers outside the U.S. Callback took advantage of the fact that, because of competition in the U.S., it was far cheaper to call abroad from the U.S. than the other way around. The mechanism was dead simple: When John Smith in Tokyo wanted to make a call to New York, he dialed a dedicated number in the U.S., waited a ring or two, and hung up. A computer would then call back, and Smith would hear a U.S. dial tone on the line. Then he could call anywhere in the world and pay U.S. prices. That could have been 36¢ per minute, vs. Japanese rates up to 10 times higher.

There was a catch: The gimmick was illegal in most places. Still, it was nearly impossible to stop—short of sending out the troops. And its impact was enormous. In a flash, hundreds of thousands of customers all over the world got a taste for lower prices. "Once it was created, the balance shifted," says Peter Williamson, CEO of U.S. operations for Australia's Telstra Corp. Simultaneously, because callback boosted the ratio

IT WILL NEVER BE THE SAME AGAIN



of outbound to inbound call volume in the U.S., it had a sharp impact on the U.S. settlement rate deficit. From 1993, when callback flowered, to its peak in 1996, net payments from U.S. carriers jumped by nearly \$2 billion. That prompted regulators in the U.S. to push for lower settlement fees.

At the same time, countries figured out another way to jimmy the system. By lowering their own settlement rates, countries could entice carriers to route traffic through them on the way elsewhere. In

Special Report

1996, Britain did just that, slashing rates in half to just 17¢ a minute. That way, instead of paying 48¢ from the U.S. to Poland, a carrier could send the call to Britain for 17¢ where it would be forwarded to Poland for an additional 26¢ cents. This scheme, known as "refile," violates international law, but it has spread to regions with high settlement rates. "We're seeing the same thing that happened in Europe happen in Asia," says Ken Stanley, an economist for the FCC.

RESALE REVOLT. The real shakeup, though, is happening right now. For decades, multinationals such as IBM and Ford Motor Co., with operations spread all over the world, have set up private global phone and data networks for their own use. Calls traversing these private lines into places such as Sweden or Britain aren't subject to settlement rates. A small amount of traffic from such private lines has always leaked out into the public network—say, if a Microsoft Corp. executive called a colleague in Hong Kong and then the call was transferred to someone else in the city. But formal connections between private lines and the public network were illegal in most countries.

Until last year, that is. The path was blazed by a startup based in Rochester, N. Y., called ACC Corp., now part of AT&T. Back in 1994, the company pioneered a so-called "simple resale" agreement with Britain that let it sell excess capacity on its leased lines to British phone companies. That led to a steep reduction in prices that convinced other countries such as Japan and Korea to authorize similar resale deals last year. As companies from RSL to MCI WorldCom have jumped into the market, the impact on prices has been instantaneous. In Hong Kong, per-minute costs for telephone time have fallen by a factor of 10 since it started resale in January, 1998. "Resale forces rates to be based on costs instead of political concerns," says Michael J. Scheele, president of San Francisco telecom consultancy M.J. Scheele & Associates. "It takes the fat out of the system." Some countries are resisting the trend: China, Mexico, and Israel, for instance, don't yet allow resale.

Even closed markets, though, can't stop another scheme now just beginning: phone calls made over the Internet. From its roots in 1993 as a quick-and-dirty way to talk for free from one PC to another, Internet telephony is growing into an inexpensive alternative to traditional calling. Now, by using gateways that connect conventional phone systems to the Net, carriers can send calls from any phone to another—using the Net as the link across continents or oceans. Bear, Stearns & Co. analyst Robert Fagin estimates that 1.2 billion minutes of in-

ternational voice traffic will be sent over the Net in 1999, slightly more than 1% of the total. As quality improves, it could climb to nearly 7% of the market in 2002, or 10 minutes, turning Net telephony into a \$968 million business.

The leader of the pack in Internet telephony today is Net2Phone. The former subsidiary of IDT charges 42¢ a minute, on average, to make international calls: A minute in France costs customers just 9¢, vs. 22¢ for AT&T. Others in the field include deltathree.com, a subsidiary of RSL Communications, and iBasis Inc., a Burlington (Mass.) startup. "It's amazing to see the biggest companies in the world brought to their knees by little American entrepreneurs," says Andy Judy Reed Smith of the research firm Atlantic-ACM.

Where does all of this leave the international telephone system? The glory days are over. The settlement process that decades subsidized the construction of phone networks around the world is doomed. The advance of technology means that it will be impossible for countries to prop up fees and so-



"Technology and competition are tearing down the monopoly"

WILLIAM E. KENNARD

FCC Chairman

strangers in a strange land. Whatever new system looks like, the fees for completing phone calls across borders inevitably are heading down toward actual cost.

That means the balance of power between the world's telephone monopolies and their customers is finally shifting. Ever since AT&T sent its first telep-

call from the U.S. to London in 1925, international consumers and businesses have been held hostage by phone companies that could virtually dictate whatever price they choose. Not anymore.

By Andy Reinhardt in New York, with Irene Kunik in Tokyo, Bruce Einhorn in Hong Kong, and Elizabeth M. in Mexico City



Q

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COPING WITH THE REVOLUTION

Many countries rely on high phone rates for cash. Will boosting calls make up for it?

Pape G. Touré, president of Senegal's national telephone company, Sonatel, has a problem. In 2002, the U.S. plans a sharp cut in the rate it pays Sonatel to complete the calls Americans make to this West African country from \$1.18 a minute to 23¢. Overall, reductions in international phone fees by other countries will put \$30 million in jeopardy—80% of the hard currency the country receives for services. So Touré is scrambling to find alternative sources of

revenue. He's increasing the number of Sonatel's phone lines in Senegal by

Special Report

25% per year, and he's cutting international calling charges, gambling that lower prices will boost traffic. "We can't hide from the fact that telephone costs are going down in the entire world," he says.

This is what the short end of the stick looks like. While customers in the U.S. and other developed countries are celebrating the demise of the creaky old international telephone system, it presents a tremendous challenge for the

world's most impoverished countries. Those sky-high rates for cross-border phone calls historically have been a crucial subsidy for many countries that are building their telecommunication networks. India received \$450 million in international payments last year—37% of its revenues from telephone services. "When you are still struggling with basic telecom development, you may need a monopoly and these external subsidies," says Daniel Rosenne, director-general of Israel's Ministry of Communications.

The prospect of losing those subsidies hasn't gone well. Many countries blame the U.S. Federal Communications Commission for its unilateral decision in 1997 to slash as much as 90% what are called "settlement" rates—the U.S. phone companies pay to carriers abroad for completing phone calls. "There was a sense that Americans were acting like *Father Knows Best*, saying: 'We are going to force you with a diktat to lower telephone charges,'" says Jack Nadler, a partner at Squire, Sanders & Dempsey in Washington.

Still, there's little recourse. Nadler represented a consortium of Latin American phone companies that sued to over-

DAKAR DIAL TONE

Senegal is raising the number of phone lines by 25% and slashing international rates to compete





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In Chile, 10 phone companies battle for market share. The result: A boom in cross-border traffic

the ruling, but the FCC won the case earlier this year. The International Telecommunications Union (ITU) voted 188-to-1 (the U.S. was the only "no" vote) to slow the rate cuts for the poorest countries, but it has no power over the FCC.

Already, many Third World countries are feeling the squeeze because of the drop in American payments. Sri Lanka Telecom Ltd. has had to double the price of a three-minute local phone call because of the decline in international phone fees. In

Senegal, ITU consultants forecast that the drop in settlements will drive down

Special Report

Sonatel's profits 44% from 1996 to 2001 and quadruple the company's debt. The impact will be felt most in small, poor countries, such as the islands in the Caribbean and Pacific Ocean. "It's a simple question of economies of scale," explains Tim Kelly, an ITU economist in Geneva. "If you have a small country with 150,000 people, such as Samoa, and you need to add satellite links for new lines, the incremental costs are much higher than if you are buying this for the American market with 270 million subscribers."

What to do? Telecom operators in developing countries are beginning to remake themselves for the new industry order.

Chile, Israel, and Tonga are cutting settlement rates even more than required by the FCC in order to boost telecom traffic and spur economic development. "The poor countries all have gone through the stages of mourning and self-denial and now are realizing they have to change," says Judy Reed Smith, CEO of Atlantic-ACM, a Boston telecom consulting firm.

HIGH-TECH HELP. Several countries have become models for how to cope. Chile has licensed 10 companies to battle for international telephone traffic, stimulating fierce competition to offer the lowest settlement rate. The result is booming growth in cross-border phone traffic.

Israel opened its telephone market in 1997, licensing two foreign-financed competitors to compete for international calls. Each now enjoys total freedom to negotiate its own settlement rates, pushing them down from \$1 a minute in 1997 to 21¢ today. Israel no longer receives more than \$100 million in telephone fees each year, but government officials think lower phone rates are bolstering Israel's high-tech sector. "We are a total outpayer [of telephone fees], and I don't care," says the Communications Ministry's Rosenne. "I'm a

regulator, not a [telephone company] shareholder."

Even less advanced countries are learning that they can bring benefits. India lowered rates 30% between 1997 and 1999 and dropped them another 30% since May. Officials there have been a 20% boost in traffic this year that partly made up for any lost revenue. India's regulator, the TRAI, says it will continue to push settlement rates down toward zero because lower prices will stimulate more traffic. However, India does not plan to reduce its settlement rate from the current 64 cents a minute fast enough to reach the FCC-determined level of 23 cents in 2002.

Some companies are proving extremely innovative. Lanka Telecom is building its business with a host of new products and services, including a calling card for Sri Lankan expats around the world. It also has begun offering lower rates to businesses in neighboring countries if they route their telephone traffic through Sri Lanka. "The Sri Lankans have taken many sensible business decisions that should be applauded," says Stephen Young, author of the recent book *Rise of Cost Based Interconnect and the Collapse of International Accounting Rates*.

Of course, adapting to the new telecommunications environment still won't be easy for many countries. Because Samoa's

market is so small, an ITU study estimates that revenues can grow only 2% a year even if prices are slashed. That means a cut in settlement fees will translate into an immediate drop in local operating standards. Meantime, many African nations are just now beginning to prepare for the loss of settlement revenues. "They have telephones, they don't have the Internet, and they won't be able to join the global development," worries former ITU Secretary General Pekka Tarjanne.

Still, many telecom operators around the world recognize the drop in calling fees as part of the increasing globalization that provides them as much opportunity as risk. In Senegal, Touré knows he still has a long way to go before his country is efficient enough to operate without lucrative payments from overseas. But he's determined to build a telecom business on low prices and whizzy new services comparable to those found in France or the U.S. The figures, Senegal will have a phone company that can stand the plunge in prices lies ahead.

By William Echikson, Brussels, with Manjeet Kripalani in Bombay

THIRD WORLD BACKLASH

The Federal Communications Commission's decision to unilaterally cut the rates U.S. phone companies pay to phone companies abroad sparked a fierce outcry around the world.

LOST DOLLARS The loss of telephone fees has been particularly painful in developing countries, where they often are one of the most important sources of hard currency. In Senegal, for example, payments by U.S. phone companies dropped to \$14.5 million in 1997 from \$19.4 million in 1996. That's estimated to have fallen to about \$10 million in 1998. The world's poorest countries, with per capita incomes below \$780, could lose around 5% of total telecom revenues.

LEGAL ACTION Latin American countries sued the FCC to rescind the commission's decision. But the U.S. courts rejected their claims earlier this year.

DIPLOMATIC PRESSURE The International Telecommunications Union in Geneva voted 188-to-1 this spring in favor of slower telephone rate cuts to poor countries than those mandated by the FCC. The U.S. was the lone negative vote. The FCC has no plans to comply with the ITU's vote.

CONTINUING RESISTANCE Some of the least developed countries, including India, say they will not comply with the FCC order by the 2002 deadline and will continue to charge U.S. phone companies higher rates.

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A FAILURE TO COMMUNICATE

Will mistrust doom the MCI-Telefónica global alliance?

Back in March of 1998, they were all smiles and handshakes. Executives at Spanish phone operator Telefónica de España and U.S. long-distance powerhouse MCI WorldCom Inc. unveiled a partnership with sweeping plans to provide telecommunications services to customers around the world. Together, the partners would "enhance the short- and long-term growth and value of the companies," beamed WorldCom's CEO Bernard J. Ebbers,

who, at the time, was busy taking over MCI. As part of the deal, MCI and Telefónica

France, Germany, and Britain, giving Telefónica a needed base in Western Europe. Telefónica also has a presence in North America—MCI's stronghold—and will have operations there if it hopes to woo many large corporate customers.

A case of squandered opportunities? Maybe. But just as MCI-Telefónica to the long list of troubled international telecom alliances. Even though telecom executives hail partnerships as the best way to provide suites of global services to their corporate customers, the dismal truth is that few fly. Consider the partnership of Sprint, Deutsche Telekom, and France Télécom called Global One. Ever since DT launched its ultimately futile bid for Telecom Italia this spring without its French partner, the Germans and French have been each other's throats. And then there's Unisource, an alliance that was so loosely cobbled together that it was never able to offer quality service consistently. AT&T and Telefónica have

quit, leaving Swisscom, Dutch carrier KPN, and Swedish operator Telia. And now the troika has decided to sell off the partnership's assets.

CULTURE CLASH. Why do these alliances work so often the heart of the problem is a wariness that prevents the partners from integrating operations or sharing competitive information. Companies enter into deals to provide end-to-end telecommunications services to their large corporate customers. The best way to do that and still provide quality network—while keeping a lid on costs—is to knit together the sales, marketing, and technical departments of the partners. The only problem is no one wants to do it. So far, companies have been willing to relinquish control of resources. Often, neither side will give up its best customers. "The alliances are by nature very unstable," says Roger Wery, who heads telecommunications consultancy Naissance Worldwide. "We're talking about r

Special Report

would create separate ventures to serve European and Latin American markets, cooperate on a bold fiber-optic ring around South America, and create a marketing company targeting the growing U.S. Hispanic community.

So much for sweeping plans and beaming CEOs. More than a year and a half later, the partnership between MCI WorldCom and Telefónica is stalled at the starting gate. Of the dozen or so initiatives the companies have announced, virtually none has come to pass. Worse, in many markets MCI and Telefónica look more like archrivals than allies. In Brazil, for example, MCI WorldCom bought a controlling stake in long-distance carrier Embratel—a move that pits it directly against Telesp, the network operator in São Paulo state that Telefónica owns. The two sides have even tangled in Brazilian courts over what services each can provide. Now, experts say the partnership may soon break up.

It would be a setback for both sides. Alone, each company will have a harder time breaking into key countries dominated by the other. Telefónica is the strongest player in the \$50 billion Latin American telecommunications market and could help MCI gain a foothold beyond its current operations in Brazil and Mexico. And MCI is among the biggest telecom guns in



Bad splice: Experts say that MCI's Ebbers and Telefónica's Villalonga may break up their partnership after months of doing nothing

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After three alliances, Telefónica may have trouble lining up a fourth

sive corporations that have distinct cultures, and that creates a lot of sparks."

MCI's partnership with Telefónica started out troubled and soon deteriorated. Neither side was ever as deeply committed as each publicly professed, insiders say. The partnership was brought into MCI WorldCom through MCI's relationship with British Telecommunications PLC, which had an alliance with MCI that broke down after WorldCom trumped BT's bid for the long-distance carrier.

Special Report

While WorldCom agreed to continue the Telefónica partnership, the truth is it goes against the grain of the maverick company that Ebbers has sought to build. "WorldCom has historically taken a go-it-alone approach," says Donaldson, Lufkin & Jenrette Inc. analyst Richard G. Klugman. Consider the ballyhooed plans for a fiber-optic ring around South America. The partners had agreed to build out a circle of fiber-optic cables that would link the continent with North America and Europe. Telefónica is pushing ahead with the plans, but with New Jersey-based IDT Corp. as a 10% equity partner. MCI declined to participate and is being courted by Bermuda-based Global Crossing Ltd. as an anchor tenant on a rival Latin American cable, industry insiders say. Asked to explain the reversal, a spokesman from MCI would say only that "we looked at it, and we weren't interested."

Indeed, a list of the alliance's initial goals reads today like a litany of broken promises. The pact called for Telefónica to distribute MCI's services in Spain. It didn't happen. Telefónica had the option of buying a 10% stake in MCI's European operations and a 46% share of the company's activities in Italy. Neither happened, and Telefónica has since created its own unit focusing on Italy. The two were to form a subsidiary to explore opportunities in Eastern and Southern Europe. It wasn't formed.

Relations are the most tense in Brazil, Latin America's largest market. The two were supposed to cooperate on investments there but instead have become bitter rivals. In July, when Brazilians were given the chance to choose a long-distance carrier for the first time, the network broke down and only 20% of calls could be completed. Each company blamed the other and, in the end, both were fined by Brazilian regulators. Among the MCI executives stirring up trouble in Brazil is Jorge Rodriguez, who previously had been responsible for building strong relations with Telefónica as his company's chief representative to the alliance. "That their differences emerged so publicly is yet another indication of virtually no cooperation between the two companies in Brazil, which is the most important Latin market for both of them," says Yankee Group Research Inc. analyst Carlos Guzman-Perry.

ALIVE, IF NOT WELL. To date, the only concrete accomplishment either side can point to is an exchange of board members: Telefónica Chairman Juan Villalonga Navarro sits on MCI WorldCom's board and MCI Chairman Bert C. Roberts Jr. is a member of Telefónica's. And if MCI WorldCom consummates its rumored takeover of Sprint, that could prove to be one more demanding distraction that could keep MCI WorldCom from moving the Telefónica relationship forward. Spokesmen from both companies say that the partnership is alive, although ex-

ecutives on either side declined to comment for this story.

The question facing Telefónica is: What next? It has been a member of three alliances, and if this one were to end, the Spanish company may have trouble lining up another dance partner. "For Telefónica to choose a fourth ally would be seen as just one ally too many," says Graham Donaldson, who follows the telecommunications industry for consultancy Analysys Ltd.

Officially, neither company is prepared to write the partnership off yet. And some analysts believe the relationship continues to make sense: MCI wants a stronger foothold in Latin America, while Telefónica needs help penetrating North America and the rest of Europe. "Each can bring to the table something that the other needs," says Glenn R. James, regional director for Latin American telecom at Deloitte Consulting. Perhaps, but neither side has yet shown that it's willing to do what it must to take advantage of what the other offers.

By David Rocks in Atlanta

THE TROUBLE WITH GLOBAL PLANS

For years, major telephone companies around the world have set up alliances to provide phone service to multinational corporations with operations around the globe. But the results have been dismal.

MCI WORLDCom-TELEFONICA 1998 The promising alliance is in disarray. Although both sides pledged extensive cooperation when they announced the partnership 18 months ago, it has accomplished almost nothing to date. As the two companies pursue their separate interests in Brazil, Spain, and the U.S., they're looking more like competitors than partners.

GLOBAL ONE 1996 Expect the partnership of Sprint, Deutsche Telekom, and France Télécom to dissolve soon. Ever since DT launched its ultimately futile bid for Telecom Italia this spring without telling its French partner, the Germans and French have been at each other's throats. The rumored MCI WorldCom takeover of Sprint would surely be the death knell, since MCI WorldCom is building phone networks in France and Germany to compete with the incumbents.

UNISOURCE 1992 Unisource showed some promise early on, but the partnership was so loosely structured that it proved incapable of delivering consistently strong service around the world. That led to the exits of Telefónica in 1997 and AT&T this year, which have hobbled the consortium. All that remain are Dutch KPN, Sweden's Telia, and Swisscom. Now, those three have decided to sell off the partnership's assets.

BRITISH TELECOM-AT&T 1998 This is the one alliance that is holding together. The partners put all their international assets into a joint venture with \$1 billion in revenues and brought on hotshot exec David Dorman to be CEO. For more reach in Asia, they took a 30% stake in Japan Telecom.

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SONY CORP. OF AMERICA CHAIRMAN HOWARD STRINGER

CONVERGENCE PLAY

Major entertainment moves since Stringer joined Sony as president in May, 1997

NOVEMBER, 1997 Invested with Liberty Media in Spanish-language TV network Telemundo

DECEMBER, 1998 Stringer named chairman and CEO of Sony Corp. of America, overseeing all U.S. units

JULY, 1999 With partner Time Warner, Sony merges music club Columbia House into CDnow, the top online music retailer

SEPTEMBER, 1999 Seals deal with Cablevision to install Sony-made digital set-top boxes for New York-area subscribers, laying groundwork for delivering Sony content

OCTOBER, 1999 Launches interactive versions of *Jeopardy!* and *Wheel of Fortune*, hoping to lead the way in interactive TV

DATA: COMPANY REPORTS, BW

STRATEGIES

DOES SONY REALLY NEED A PARTNER?

A distribution arm may not be necessary if digital delivery of movies and music pans out

It was vintage Howard Stringer. At a party marking the 20th anniversary of the Sony Walkman in New York on Sept. 23, the chairman and chief executive of Sony Corp. of America stood awkwardly in the spotlight and began his speech. But in the midst of introducing colleagues from Tokyo headquarters, Stringer couldn't resist ribbing them for being in a balcony overlooking the journalists below "so they don't have to mix with you." He noted that one exec's wife was a "a lot better looking than he is," and promised a free Walkman to anyone who could spell the name of another executive.

Coming from anyone else, such barbs might seem harsh. But Stringer's cheery irreverence has served the onetime CBS Corp. executive well. Since joining Sony as president and de facto U.S. ambas-

sador in 1997, Stringer has mended fences within Sony U.S. and helped spruce up the company's sinkhole image in Hollywood. Now, he and his boss, Sony Corp. President Nobuyuki Idei, have also begun to confront the question that has dogged the Japanese company for years: whether making TV shows, films, and music is the right fit for a company best known for its top-notch TV sets, VCRs, and stereos (page 24).

Since he was elevated to oversee all of Sony's \$18-billion-a-year U.S. business last December, Stringer has begun to implement Idei's vision of a "networked home" in which Sony can bypass conventional distribution such as TV networks and music stores to sell its stuff directly and digitally to consumers. He has overseen a string of moves, including the acquisition, with Time Warn-

er Inc., of leading online music retailer CDNOW Inc., the development of interactive versions of its hit game show *Jeopardy!* and *Wheel of Fortune*, and a new foray into building digital set-top boxes for cable operator Cablevision Systems Corp. that will feature Sony content. There's even a new *Sony* magazine on the newsstands, from which breathless profiles of Sony stars' products can be culled for \$5.95.

But is it enough? In the post-CBS-com world, Sony's Columbia TriStar, the biggest Hollywood studio with major links to cable or broadcast TV, is Sony's one small step into network ownership, an investment in Spanish-language network Telemundo Group Inc., has far been a disaster. Idei's interactive vision sounds cool, but even Stringer flinched when announcing the Cablevis-

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deal: "A lot of promises have been made over the years—many of them by me, actually—that were never quite realized."

That unfinished agenda leads rivals and analysts to believe that at least a partial sale of Sony's entertainment business is inevitable. Stringer declined to comment for this article, but Sony sources say nothing is imminent. And right now, the company has the luxury of time. Its stock has more than doubled

their own content such as America Online Inc. Others who may be interested in Sony's studio, say other industry sources, include megabillionaire Paul Allen and cable giant Comcast Corp.

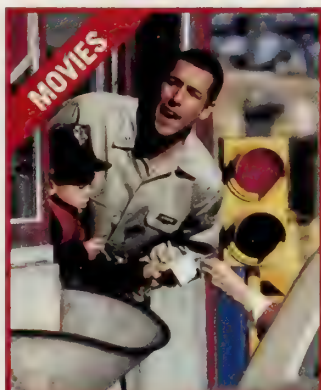
Clouding any potential alliance are rumblings—dismissed by some at Sony—that Idei and Stringer's vision is at odds with that of Ken Kutaragi, the engineer with growing clout who masterminded PlayStation. Kutaragi and Idei apparently

as many as 35,000 simultaneous users. But without a linkup to TV or a major Web portal, Sony's Web presence has not expanded far beyond promotions and extensions of existing businesses. Still, "we're not losing millions on the Internet like most folks," Stringer said earlier this summer. "And we don't want to share our brand with somebody that didn't exist three years ago."

Pushing that brand into the crowded market for set-top boxes is another example of how Sony aims to find new

ways to distribute its content. Its boxes could offer games, e-mail, and on-demand access to Sony's sizable music,

SONY'S ENTERTAINMENT PORTFOLIO



Money-makers such as the recent Adam Sandler flick *Big Daddy* have made the Columbia TriStar studio profitable, but its earnings remain volatile.

Buyers from Paul Allen to AOL might be interested in its media assets



Columbia TriStar's hits include *Dawson's Creek*. It has eight new series on prime time this season, even though Sony doesn't own an English-language network.



Sony Music has a 16% share of the U.S. market thanks to Latino sensation Ricky Martin and a roster of acts that includes Mariah Carey.



PlayStation 2 is expected to be a winner, and Sony is building its online-gaming presence with *Everquest*, a game that can involve 35,000 players at once.

this year, thanks to buzz on its PlayStation 2 game system, Japan's improving economic outlook, and a corporate restructuring announced in March.

What's more, in Sony's overall picture, the entertainment assets are not the drag they once were. They generated \$2.6 billion in revenue and \$84 million in operating income in the quarter ended on June 30, while the overall company generated operating income of \$434 million on revenue of \$15.2 billion, mostly from consumer electronics and PlayStation.

Still, the prospect of tying the studio to a partner was another reason behind the stock rise, says Masami Fujino of Jardine Fleming in Tokyo. Certainly, Stringer spends much of his time discussing partnerships with other media powerhouses, including periodic talks with NBC. "They need a strong alliance, but it may not be a traditional media partner," says Thomas Middlehoff, the chairman and CEO of media giant Bertelsmann. Indeed, Middlehoff sees Sony's film and TV units as a good match with Web players interested in owning

are sparring over the direction of PlayStation 2, a powerful computer in its own right, that could develop into Sony's ultimate weapon for distributing all kinds of entertainment content after it debuts next year.

In the near term, Sony execs have high hopes for the company's moves into interactivity. In early October, WebTV users will be able to play along to *Jeopardy!* and *Wheel of Fortune*, Sony's syndicated hits. The simple goal, says Andrew J. Kaplan, executive vice-president of Columbia TriStar Television Group, is to keep viewers glued to their sets and develop new revenue sources. And, compared with the Web, getting just 10% of *Wheel of Fortune*'s nightly 20 million viewers to participate interactively could create a much bigger community than some of the Web's most-trafficked sites now boast.

On the Net, much of Sony's early success has been in interactive games, where its *Everquest*—a medieval fantasy in which players from across the world join forces to battle "enemies"—attracts

and TV libraries. An exec close to

AT&T says the cable giant is talking Sony about using its box for some of AT&T's 11 million subscribers.

The deal to acquire CDNow with partner in Columbia House Music Club is Sony's attempt to assure itself a seat at the table as broadband Web service takes off and digital downloading of music begins in earnest. To hedge its bets, Sony Music has also been investing in ventures including chat service Talk.com, e-mail companies Infobeat and Emazing, and Spanish-language portal yupi.com.

The week of Sept. 27, Stringer jetted to Tokyo for strategy meetings with Idei and other top Sony officials. No doubt, the fate of the entertainment business was on the agenda again. The more Stringer ties it to Sony's digital future, the harder it will be for Japanese giant to part with it.

By Richard Siklos in New York, Ronald Grover in Los Angeles, Irene M. Kunii in Tokyo

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COMMENTARY

By Mike France

JOURNALISM'S ONLINE CREDIBILITY GAP

Journalism is built on trust. If readers believe that a reporter has a hidden agenda, then no amount of heroic reporting, graceful writing, or bold photography will ever win them over. That's why most news organizations have elaborate rules designed to ensure that their editorial content isn't biased by the bottom line. Ad salespeople are barred from discussing articles with reporters, for example, and only editors are allowed to see copy before it's published.

As magazines, newspapers, radio stations, and television networks rush to colonize the Internet, however, the Great Wall between content and commerce is beginning to erode. Some news organizations now earn small transaction fees from some product sales on the World Wide Web. That means there can be a direct economic incentive to say nice things about, say, a particular paperback or laptop—something that didn't exist when book publishers and computer makers were limited to buying fixed-rate ads. Meanwhile, *forbes.com* is running Microsoft Corp. ads that could easily be mistaken for staff-written articles. That confuses readers and seems to violate the spirit of a long-standing American Society of Magazine Editors (ASME) rule prohibiting advertisements with "an editorial appearance."

The latest media company to take a step down this slippery slope of ethical compromise is General Electric Co. Its CNBC unit, which runs a business-news Web site, on Sept. 14 acquired a 12.4% stake in Archipelago Holdings, an electronic communications network for trading stock. Long-term plans are likely to include allowing visitors to *cnbc.com* to link directly to Archipelago. That means CNBC could be in the awkward position of both providing coverage of on-

line trading and profiting from it.

All these developments raise a tough question: Is there an irrevocable conflict between e-commerce and ethical journalism? As news outlets get closer to the companies they cover, it's possible that they'll lose the faith of their readers and viewers. "At a certain point, people won't be able to differentiate between what's trustworthy and what isn't," says Orville Schell, dean of the Graduate School of Journalism at the University of California at Berkeley.

Over the long term, he worries, this loss of credibility could have a corrosive effect on society in general—especially given the media's importance as a political, cultural, and economic watchdog. "If people don't trust the information, it's not much better than a Marxist-Leninist society," Schell says.

Are such fears overblown? After all, none of the ethical quandaries facing media Web sites are totally new. Magazines, newspapers, and TV stations already face a conflict of interest when they report on advertisers—and yet they have developed a set of rules that helps maintain credibility. Nor is CNBC really such a pioneer. Other business news outlets such as Dow Jones, Reuters, and Bloomberg, already have indirect ties to their own electronic stock-trading networks. What's more, the traditional press isn't all that highly regarded by the public anyway. In spite of having more extensive ethical rules than their Web counterparts, newspapers, magazines, and TV stations still make plenty of mistakes, occasionally invade people's privacy, and sometimes hype their stories.

NEW MEAL TICKET. So it's tempting to argue that the ethical problems posed by e-commerce are just a slight difference of degree from those that the news media already face. But the fact is, the issues are different in kind. E-commerce could force journalists to buddy up to advertisers in ways they never have before. That's because, at the moment, the economic model that supports most news organizations doesn't appear to be working online. The traditional print and electronic media live off of subscription fees and advertising sales. However, neither of those revenue streams is likely to keep them afloat on the Internet. Web surfers, for starters, are used to getting content for free, and they have been reluctant to





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E-commerce could force journalists to buddy up to advertisers in ways they never have before

shell out any money for it.

Similarly, companies don't like paying a flat fee for online advertising—it's too hard to track the effectiveness of their marketing dollars. Instead, they only want to pay for actual sales leads, which can be easily monitored on the Web as readers click from site to site. As a result, advertisers will increasingly pressure media Web sites to support themselves with e-commerce transaction fees. By the year 2003, media sites will receive \$25 billion in revenue from transaction fees, compared with \$17 billion from ads and \$5 billion from subscriptions, estimates Charlene Li, senior analyst for new media at Forrester Research Inc. in Cambridge, Mass.

SILVER LINING? This fundamental shift in the way the media make money could potentially change the way they cover the news. The more the press gets in the business of hawking products, the harder it will be to criticize those goods—and the companies making them. A bit of puffery inserted here, a negative adjective deleted there—it doesn't take a lot to turn a review or story about, say, smart phones, into something approaching highbrow ad copy.

How well the press stands up to this structural threat to its integrity will depend on how much honesty people demand of the news media—and how much it demands of itself. On the first point, the key issue is whether Net shoppers will vote against shoddy journalism with their buying power. Surely, people looking for mortgages, voting for a politician, or trying to decide what movie to see will continue to need unbiased information to help them make decisions. So it's possible that, over time, quality news sites will be able to generate enough traffic to survive on revenue from ad sales—and resist the pressure to sell out to e-commerce. "The morass on

the Internet is inevitable, but weirdly, it could create a business opportunity," says media critic James Fallows. "The more there is a big soup of information, the more value there is to things that appear to be straight."

Fallows points out that consumers have been swift to discipline sites that are caught acting unethically. When it was revealed that Amazon.com was taking fees of up to \$10,000 for books that it labeled as "destined for great-

people know what good information is when you get into culture, society and politics."

NEW RULES NEEDED. The second factor that will determine whether journalism can resist the pressure of e-commerce is how well reporters and editors police themselves. So far, news organizations have built their Web sites first and dealt with ethical questions later. The rear-guard effort has stopped some of the more egregious abuses and resulted in some

well-intentioned efforts to apply existing ethical rules online. ASME, for example, has published advertising guidelines for the new media.

However, simply taking the old rules and applying them on the Web won't be good enough. Because new organizations are going to be under more pressure than ever from their advertisers, they have to come up with even tougher ethical guidelines. One step that may be necessary is more complete disclosure of online business relationships. If *businessweek.com*, say, were to take a cut of the sales of every Hewlett-Packard Co. computer sold through links between the two Web sites, then this information would have to be disclosed in any articles about the company. So far, the vast majority of news

A CRUMBLING WALL?

To preserve editorial independence, news outlets try to keep the institutions they cover and advertisers at arm's length. But this is proving hard to do online.

TRANSACTION FEES Many media Web sites take a percentage of their online product sales. That puts them in a closer economic partnership with advertisers than is the case with traditional fixed-rate ads.

MISLEADING ADS Long-standing ethical rules bar magazines and newspapers from printing advertisements that look like editorial copy. But on the Web, many publications are blurring the distinctions.

EQUITY STAKES Business publications frequently belong to big conglomerates and write about other units inside the same company. But it's rare for them to make direct investments in corporations they cover. CNBC crossed this line when it acquired a stake in Archipelago last month.

SPONSORED EDIT Nearly all news publications avoid "sponsored edit"—stories underwritten by one advertiser. But it's thriving online.

DATA: BUSINESS WEEK

ness," for example, its customers were outraged, and the company quickly agreed to disclose future promotional payments.

For every Web site that has been caught bending the rules, however, there are dozens more that are pulling the wool over customers' eyes. It's unrealistic to think that every online ethical lapse will be exposed—or that in many areas of interest, the public particularly cares. "Most people aren't very discerning," says Steven Brill, chairman and editor-in-chief of *Brill's Content* magazine. "Maybe they need good financial information, but I don't think

sites have fallen far short of this standard of disclosure.

That situation may have to change. No matter how high the tide of e-commerce rises, the only thing the press has to sell, ultimately, is its credibility. We're still in the early days of Internet journalism, but unless media organizations start taking stronger steps to defend their integrity, there will be a gradual decline in reporting standards on the Web and ultimately, a loss of the public's trust.

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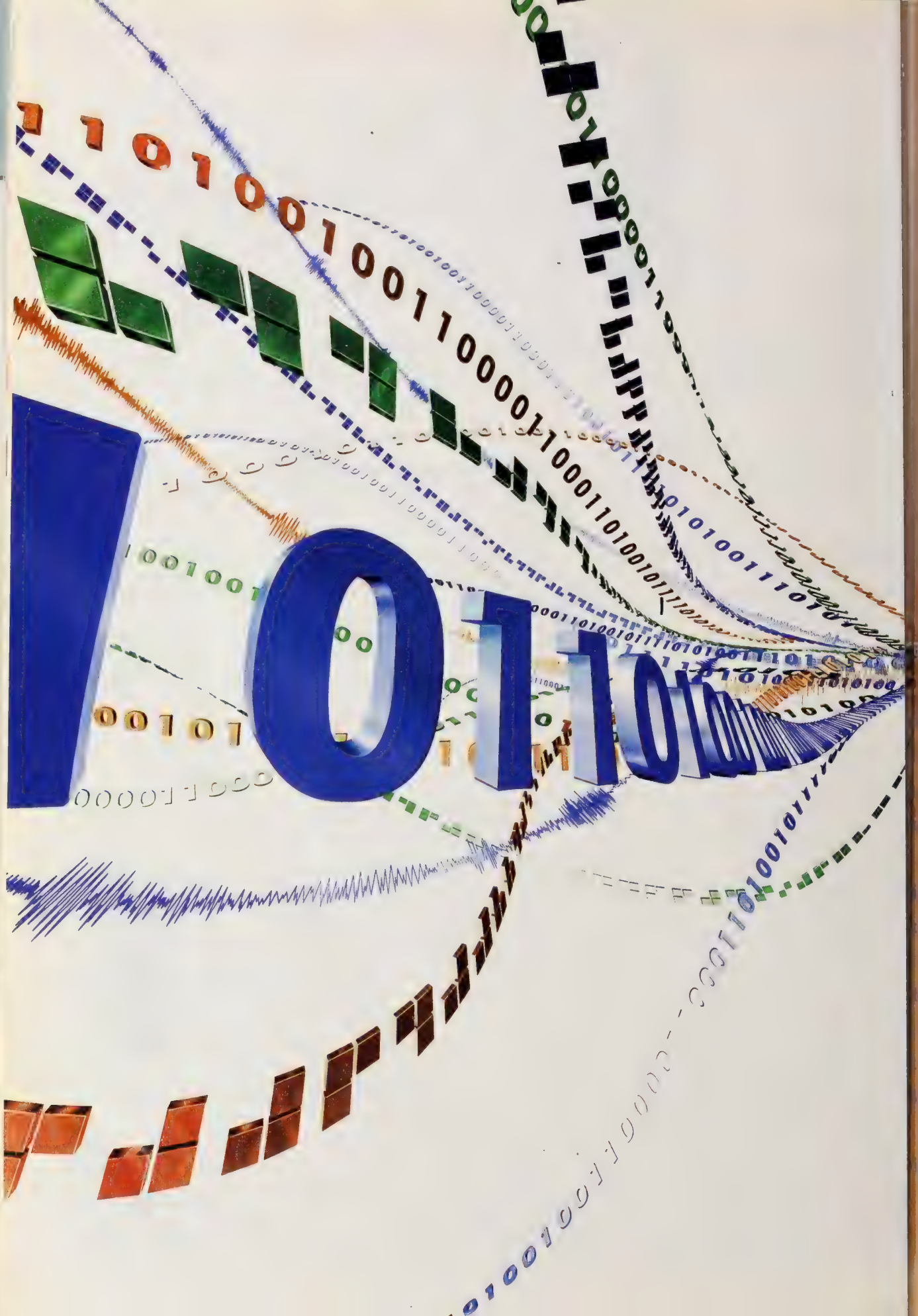


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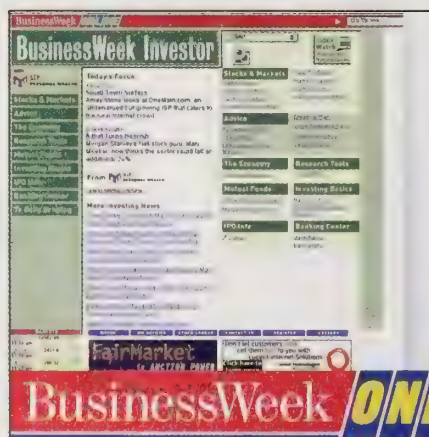
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FAB FOUR

Senior V-P Steve Tso, in tie, with employees at a fab plant in Hsinchu. The first task after the quake was to restore electric power

spent hours on the phone telling top government officials—including Premier Vincent C. Siew—they needed at least 25% of normal power to stabilize the fabs. Two days later, they got it. Tseng also began a joint effort with other chipmakers to secure power

for the Hsinchu industrial park.

While the top managers dealt with the utilities and government bureaucrats, Tso organized repair of sensitive machinery such as "steppers," the machines that etch circuits on silicon. One of the biggest problems was figuring out how to replace cracked quartz elements inside the silicon furnaces.

Working with other chipmakers, TSMC worked out a system for rationing nitrogen among five plants, thus stretching an eight-hour supply to 24 hours. Once power was restored on Sept. 25, the pace accelerated. Each furnace for baking silicon had to be thoroughly cleansed of contaminants. And since even the slightest movement can cause malfunctions in steppers, each had to be carefully reset and recalibrated. Engineers started working around the clock, camping out in offices overnight.

Tso didn't wait for full power to be restored. Working with just 10% from backup generators, he began cleaning the furnaces, shaving critical hours from the task. "In the U.S., engineers probably would have waited for full power before trying to do that," says Norris.

After a week, four of TSMC's fabs are nearing 90% capacity. The fifth, on the fifth floor of a building, suffered more harm. That puts Tso and group six days ahead of their first guess of how long it would take to recover. Tso says he hopes the performance reassures customers more than the earthquake worried them. It will take more than a few aftershocks to rattle this team.

By Jonathan Moore in Hsinchu

SEMICONDUCTORS

FAST CHIPS, FASTER CLEANUP

How TSMC got up and running again after the Taiwan quake

The aftershock in Taiwan's Hsinchu Science based Industrial Park lasts 20 seconds, causing buildings to shake. But the managers of Taiwan Semiconductor Manufacturing Co's No. 2 and No. 3 fabrication factories keep calm. A week after the Sept. 21 quake that injured 8,000 buildings and killed 2,100 people, TSMC is focused on getting its ultra-sensitive chipmaking machines back on line. In the past few days, M.C. Tzeng and J.K. Lin, the two engineers in charge of repair, have learned a lot about the extent of damage and control. "This one [aftershock] won't cause any harm," Lin says confidently.

News of the quake sent investors and electronics execs around the world to their calculators to estimate possible damages. A disruption in supplies from Taiwan for even a couple of weeks could dim the outlook for sales and profits in everything from computers to phones to washing machines. Taiwan's factories produce 4.4% of the world's chips, but account for 56% of the outsourcing—runs of specialty chips are vital to dozens of products. Despite all the human devastation,

the long-term damage to Taiwan's chip industry is expected to be small. TSMC, which had to scrap 28,000 silicon wafers and expects to lose up to 13 days of production—about \$88 million in revenue—began recovery efforts 15 minutes after the big quake hit at 1:47 a.m. A crowd of TSMC managers and engineers gathered in the rain outside the two "fab" plants. Within hours, they were telling customers what to expect.

TOXIC CHALLENGE. The first priority was to restore power to the factories and to a nitrogen gas plant. Without electricity, there's no way to pump in nitrogen to purge toxic gases from the fabs. "Without power, we can't even inspect the machine to see what's damaged," says Steven Tso, senior vice-president of manufacturing and technology.

In fact, it was a full day before engineers could even enter the fabs. At first, utility officials warned it might take weeks to restore power—an unacceptable disruption. "If we had to shut this down, I don't know how we would ever restore credibility with our customers," says TSMC President F.C. Tseng.

Tseng and Chairman Morris Chang

THE INTERNET

EARTHLINK TO AOL: WATCH YOUR REARVIEW MIRROR

The new No. 2 ISP is a long shot, but an ambitious one

Talk about your hot home-based business. In a mere five years, Charles M. Brewer has turned Atlanta-based MindSpring Enterprises Inc. from a desk in his studio apartment into one of the nation's largest Internet service providers. And thanks to his Sept. 23 merger with EarthLink Network Inc., of Pasadena, Calif., Brewer has vaulted over the likes of Microsoft, AT&T, and Prodigy to become the nation's second-largest ISP behind America Online Inc.

Next? Brewer and his scrappy team used their merger news as a chance to pick a public fight with their far bigger rival for supremacy of the Internet-access business. "The message to AOL is that objects in the rearview mirror are a lot closer than they may appear," says Michael S. McQuary, who will serve as president of the combined company, which will be known as EarthLink.

That may be a bit of bravado. Although the merger doubles Brewer's customer count to 3 million, and revenues to \$650 million, that's a far cry from AOL, which boasts 20 million subscribers and \$4.8 billion in sales. And given AOL's marketing muscle and masterful use of messaging and chat technologies to give users a sense of community, analysts give Brewer & Co. long odds of catching up. "I don't see anything in the merger that enables EarthLink to attack AOL's strengths—its ease of use and its reputation as the place to go for your first Internet experience," says Jupiter Communications Inc. analyst Joseph Laszlo.

Not surprisingly, Barry M. Schuler, president of AOL Interactive Services, agrees—deriding rivals like EarthLink as "players with



BREWER AND PAL: He started just five years ago

onesy, twosy millions" that had to consolidate to get to even that level.

But Brewer & Co. sincerely believe they can narrow the gap between their company and AOL by attacking the giant where it's weakest: providing strong customer support and giving small businesses the customized services they can't get from AOL. "There's a high degree of dissatisfaction among AOL customers,"

says EarthLink CEO Charles "Gaw" Betty, who cites a recent J.D. Power and Associates survey of the largest ISPs that ranked AOL and its separate CompuServe unit at the bottom in customer satisfaction (MindSpring ranked first and second, respectively). Schuler bristles: "Customer satisfaction and retention are at their highest in our history. And we continue

to experience the fastest growth in the business."

For his part, Brewer is preparing to gamble a whopping \$300 million—or nearly half his current revenues—on a marketing blitz that he hopes will enable EarthLink to sign up 2 million new subscribers by 2000. One group EarthLink believes is ripe for picking is AOL's estimated 3.5 million small-business customers, whom Brewer hopes to woo away with customized mail addresses, e-commerce support, and Web hosting. Given AOL's consumer focus, "it is infinitely vulnerable on the small-business front," says Yankee Group Research Inc. analyst Michael Klein, who says the new EarthLink ranks second only to VeriSign in sites hosted, with 90% **LEAPFROG.** Brewer is banking on partnerships to help close the gap with AOL. As more local long-distance providers scramble to offer one-stop shopping, EarthLink officials hope to provide the Internet component to telecom companies looking to expand. Indeed, when Sprint Com-

unveils a new bundled service plan next year, the Internet access component will be provided largely by EarthLink.

Still, even on the Internet where overnight sensations routinely leapfrog leaders, analysts wonder if EarthLink is too late to catch AOL. With nearly half of U.S. homes already online, "companies will have to start stealing customers from other ISPs

keep growing," says Strategis Group analyst David Eisner. That suits Brewer, who relishes the challenge of David. The question is whether the stone can be rolled or even wound around Goliath.

By Dean Foster
in Atlanta, and
Catherine Yang
Washington

STRATEGY

ADVERTISING

EarthLink plans to spend \$300 million—a sum equal to half its revenues—on a national ad campaign aimed at the one million AOL subscribers who defect each month. Its selling point: better customer service.

SMALL BUSINESS

EarthLink plans to lure small-business subscribers from AOL by offering customized e-mail addresses, home pages, and applications that AOL doesn't.

PARTNERSHIPS

EarthLink plans to team up with communications giants looking to provide one-stop shopping. When Sprint begins offering bundled phone and Net service in mid-2000, EarthLink will offer Net access in many markets.

HOW DO YOU PREPARE NATURAL GAS
FOR A LONG JOURNEY TO SOME COLD, REMOTE LOCATION?
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delivering vast quantities of natural gas over great distances gets to be not only logistically difficult, but expensive. So Phillips Petroleum developed a proprietary means of producing liquefied natural gas, a process that chills the gas, shrinking it over 600 times, turning it into a liquid form that is

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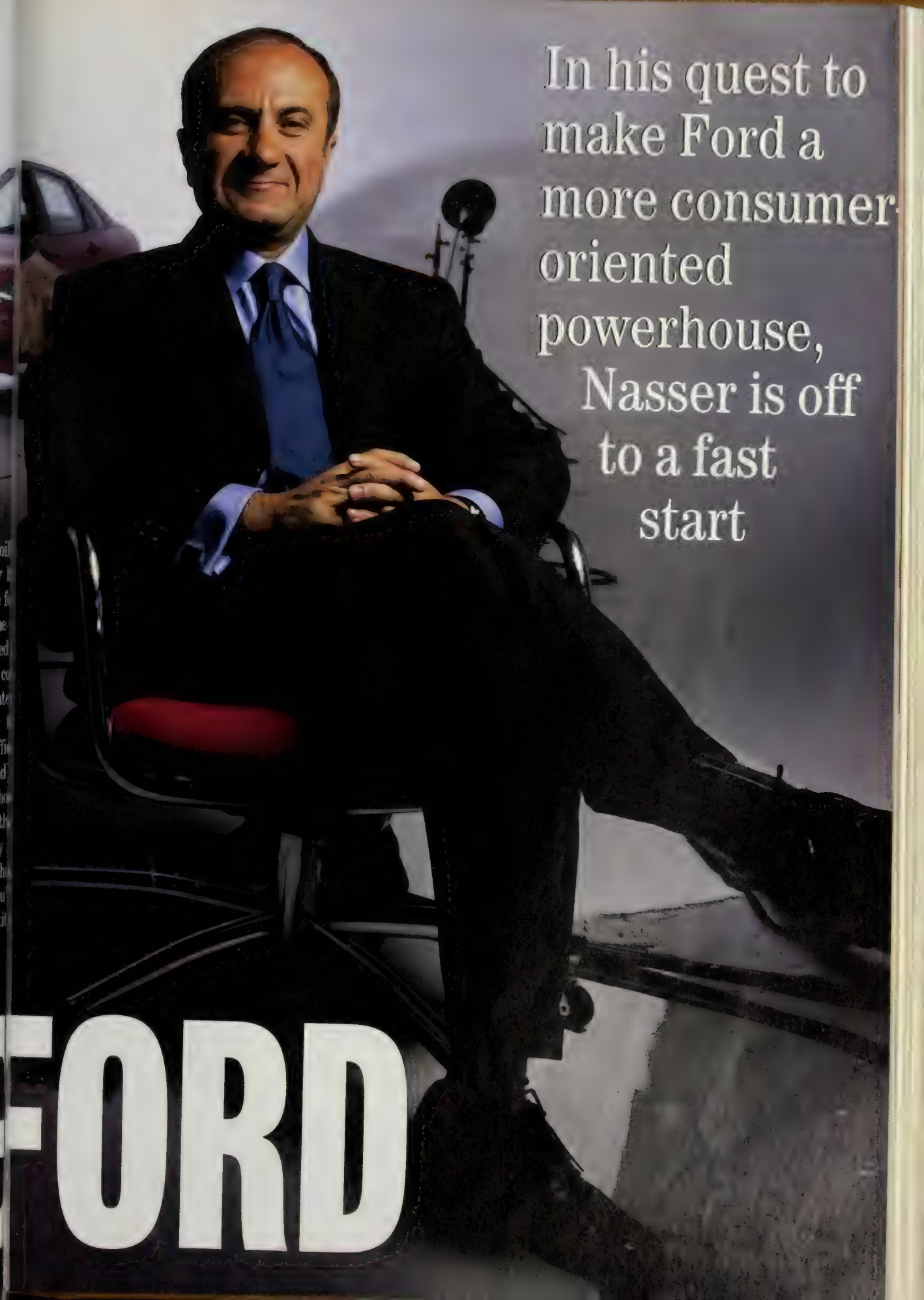
Jacques A. Nasser is on a tear. Prowling in his shirtsleeves among tables ringed with young managers in a Dearborn (Mich.) conference room, Ford Motor Co.'s new chief executive is outlining his vision of the new Ford as part of a three-day training program for newly minted junior executives. The fast-changing auto business is brutally competitive, he reminds them. And nowhere is that more true these days than within the walls of Ford. If playing at this level doesn't make "the hair stand up on the back of your neck when you talk about it," he suggests, "then go somewhere else. Go to our competition. We'd love it."

Cover Story

But Nasser's fervor really starts boiling over when he describes the mentality trying to banish forever. He grabs a blue folder from a table and tells a story about the Ford. "I knew a senior officer who used to carry a list of the 50 top officers in the company with their birth dates. Every time he tells them, waving the folder. Why? So the officers would know when they were retiring and would get his next promotion. Nasser is shaking his head now, and the managers are frozen in their seats, barely breathing. "There is nobody out there carrying around a birthday list!" he thunders, slapping down the folder. "You've got to earn [a promotion]. The days of entitlement are over."

NEW MODEL: *Nasser has declared war on the industrial giant's stodgy, overly analytic culture*

REMAKING

A man in a dark suit and blue tie is sitting on a dark-colored car. He is smiling slightly and has his hands clasped in his lap. The background is a cloudy sky. The car's wheel and part of its body are visible.

In his quest to
make Ford a
more consumer-
oriented
powerhouse,
Nasser is off
to a fast
start

FORD

ment at Ford Motor Co. are gone forever."

Are they ever. Since the hard-charging 51-year-old executive took over in January, he has picked up the whole organization by the lapels and shaken it. His goal? To reinvent the 96-year-old industrial giant as a nimble, growth-oriented consumer powerhouse for the 21st century, when a handful of auto giants will battle across the globe.

That's why Nasser has declared war on Ford's stodgy, overly analytic culture. In its place, he envisions a company in which executives run independent units—cut loose from a stifling bureaucracy and held far more accountable for success and failure. And with a consumer focus at the heart of his retooled Ford, he's banking on a future in which designers, engineers, and marketers someday will do a far



Soon, Nasser will unveil a shakeup that will rock Ford's units around the world



2001 FORD EXPLORER SPORT TRACK

better job of anticipating the wants and needs of car buyers.

He's hardly there yet, but Ford's new CEO is off to a jackrabbit start. In his first nine months, Nasser seems to have more initiatives in the works than a used-car dealer has negotiating ploys. Since January, he has spent \$6.45 billion buying Volvo, revved up efforts to overhaul the way Ford designs its cars, and launched plans to increase Ford's luxury-car sales. And with an innovative deal Nasser struck in early September with Microsoft's MSN CarPoint service, he's moving far faster than other auto makers to embrace the Net.

ALL STARS. That's not all. Nasser soon plans to unveil an organizational shakeup that will rock Ford's units around the world. Moving away from the centralized authority established by his predecessor, Alex J. Trotman, Nasser is creating semi-autonomous businesses out of the company's brands and regions, such as Ford of Europe and Ford of South America. And to sharpen profits, he's pushing to spin off Ford's low-margin parts operation, Visteon Automotive Systems (page 140), even as he trolls for higher-margin services. He already has taken tentative first steps toward a risky cradle-to-grave strategy in which Ford will have a hand in everything from auto repair to junkyard recycling.

To help him out, Nasser has recruited an all-star team of executives, including a key designer of Volkswagen's new Beetle and the man who revived BMW's luxury line. Indeed, with DaimlerChrysler in turmoil and General Motors still run by its old guard, Nasser's Ford is suddenly the place to be for ambitious Motown executives. "Nasser is

positioning Ford to make a quantum leap," says consultant Noel M. Tichy, an adviser to General Electric Co. CEO Jack Welch, who is now working with Ford. "He wants his legacy to be what he did for Ford what Welch did for GE."

It's an ambitious strategy—and if he pulls it off, Nasser will have created not just one of the best global auto companies but one of the best global companies, period. Yet it's also full of risks, at least of which is that he may simply be pushing too hard in too many different directions to put his stamp on the place. Within the once-hidebound corridors of Ford's headquarters, there's a sense of excitement and uncertainty about where Nasser is going. "Ford is an amazing place right now; we haven't seen a personality like Jac's in this business for a long," says David E. Cole, director of the University

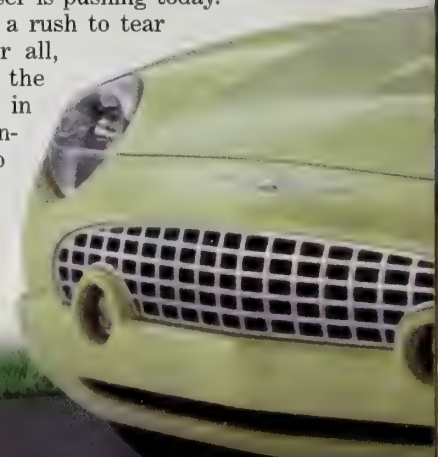
Michigan's Office for the Study of Automotive Transportation. "It's either going to explode in greatness or it's going to explode."

It's also a pretty heady place to be for a restless, Lebanese-born outsider. Since starting as a young manager in Australia years ago, he has spent nearly all of his career at the far reaches of the Ford empire, bringing along a son, Nasser, his wife and three daughters, a son. Nasser early

showed the impatience with Ford's bureaucratic field that still fuels him today. He recalls that when he left in 1981 for Ford's struggling Philippines unit, his boss warned: "If you leave, you'll never come back to Ford of Australia."

He did, though, returning to turn the troubled unit around in 1990 before moving on to do the same in Europe. By the time he finally hit headquarters in 1994 to head product development, Nasser had developed a nimble entrepreneurial style, says Robert A. Lutz, an ex-Chrysler vice-chairman who was once Nasser's boss at Ford. "Jac learned to make decisions in smaller markets where you could make fast decisions without a lot of bureaucratic oversight from Dearborn," says Lutz, now chairman of battery maker Exide Corp. Recreating that experience for a new generation of Ford managers—even those at Dearborn—drives many of the changes Nasser is pushing today.

But why such a rush to tear things up? After all, Ford is already the strongest player in the global auto industry—thanks to the trail Nasser blazed on his way to the corner office. Back in 1996,



...Nasser was elevated to chief of global auto operations, and had the worst profits from total vehicle sales of any auto maker, and two-thirds of its \$4.4 billion net income came from financial services. Nasser swept in like a tornado, dropping car models and jobs and squeezing suppliers for a cumulative \$6.2 billion in savings.

But Nasser—who has come to despise his “Jac the Knife” soubriquet—did much more than cut costs. His push for more creative design has been instrumental in allowing Ford to seize the lead in the red-hot markets for pickups and sport-utility vehicles. The result: Ford is now the world’s most profitable car maker, with \$5.9 billion in net income from continuing operations last year. Thanks to its purchase of Volvo and its increased control of Mazda, Ford looks likely to overtake GM for global sales crown by 2001. And car buyers aren’t the only ones pleased. Ford’s stock price has risen 130% since the start of ’96, outracing the 71% gain of the Standard & Poor’s stock index as well as its global auto rivals.

But now, Nasser needs to take his game up a notch. For if it appears to be firing on all cylinders, in fact it’s hitting on only one: trucks. Torrid SUV, minivan, and pickup sales in North America contributed 64% of Ford’s operating income last year, though they accounted for just 45% of total revenues. Meanwhile, car sales in North America bring in barely 12% of profits. Ford makes just \$489 on its average car sale, says John A. Casasa, an analyst at Merrill Lynch & Co., compared with a fat \$1,785 on each truck. “Cars in North America—that’s a downer for us,” Nasser admits.

Just as alarming, there are signs that Ford’s truck profits are getting squeezed. Toyota, Honda, Mercedes, and BMW are rushing to cash in on the truck-profit bonanza with a flood of new pickups, SUVs, and minivans of their own. Chrysler and GM are piling on rebates unthinkable a few months ago. The heightened competition, coupled with recent tight supplies, trimmed Ford’s F-150 pickup sales nearly 8% in August. That’s one reason Ford’s stock is down 15% this year.

GLOBAL GLUT. Nasser’s cost-cutting also did little to patch up Ford’s woeful overseas operations. Facing mounting losses in South America, Ford announced a \$2 billion restructuring of its Brazilian unit on Sept. 22. Things aren’t much better in Europe, where Ford eked out only \$245 million in profits in the first half, on sales of \$14.6 billion (page 142). Morgan Stanley Dean Witter’s Stephen J. Girsky says he hoped strong North American results would buy Nasser room “to fix the rest of the world. [But] Ford may be running out of time.”

The rivalry can only get fiercer. With each megamerger—just in the past year, Daimler Benz acquired Chrysler, Ford bought Volvo, and Renault took a big stake in Nissan—the industry is moving closer to the day when a handful of

companies have the scale to squeeze purchasing and manufacturing costs and plow billions into new models. In the meantime, the world is awash with capacity: The industry can make 20 million more cars and trucks than it can sell.

To keep Ford on top of that scrambling heap, Nasser has snatched up some of the hottest management talent in the world. First up, three years ago,

NASSER'S NEW TEAM

Top outside hires include new heads of Ford's luxury, design, and marketing units

CHRIS THEODORE, J MAYS, WOLFGANG REITZLE, AND JAMES SCHROER SHOWN IN THE UPCOMING FORD THUNDERBIRD



ILLUSTRATION BY KATHLEEN

was James C. Schroer, a former RJR Nabisco marketing chief who was working as a Booz, Allen & Hamilton consultant when Nasser recruited him to be Ford's global marketing vice-president. He has been put in charge of building up Ford's brands, especially its weaker Mercury and Ford nameplates. Next, in October, 1997, came J Mays, the 44-year-old hotshot who sketched the first eye-catching designs for what became VW's new Beetle. And Chris Theodore, an engineer known for work that helped make Chrysler's bread and butter minivans a hit, came on board to run large- and luxury-car development in March.

The biggest coup, though, was scooping up former BMW whiz Wolfgang Reitzle to take control of Ford's four luxury brands: Jaguar, Volvo, Lincoln, and Aston Martin. Reitzle, who had been the German auto maker's No. 2 executive, won much of the credit for its resurgence in the '90s. He joined Ford in March after he lost out in a boardroom shakeup. His arrival at Ford signaled Nasser's determination to turn Dearborn into a sort of Camelot for car mavericks.

Can Ford's car designs be as exciting as its trucks?



2001 FORD F-150 SUPERCREW TRUCK

Perhaps the most daunting challenge for Nasser's new management team will be to capture the magic that Ford found in trucks and sprinkle it onto the car side. So far, the most visible changes have come in the already-profitable luxury-car unit, where Reitzle is moving quickly to expand sales and margins. Reitzle envisions saving costs by sharing parts or even whole chassis between the brands, but "only where the customer can't see or feel it." First up: the surprisingly stylish Lincoln LS and \$42,500 Jaguar S-type introduced this year, both of which are selling well.

"BABY JAG." Reitzle's toughest task, though, will be to boost Ford's luxury-car sales from 650,000 units last year to 1 million by 2004. To succeed, he'll have to broaden the market for new Jags and Volvos without tarnishing their images. The first test for Volvo comes with the more affordable S40 sedan and V40 wagon, now showing up in the U.S. starting at around \$23,000. And in two years, Jaguar, too, will take a leap with its downright thrifty \$30,000 "Baby Jag."

Still, it's one thing to create Jaguars with sizzle; it's another

to bring excitement to more plebeian cars as the Taurus. That's why one of Nasser's top priorities has been revamping how it designs its vehicles. His overhaul started when, on arriving in Dearborn, he banished Ford's longtime practice of updating aging models to match those of top competitors. He has ended the dependence on overly quantitative analysis and market research based on showing preordained options to focus groups.

The shortcomings in Ford's old design approach led to some classic missteps. Take the 1995 Windstar minivan. It looked at research that asked customers if they wanted an additional sliding door on the driver's side. Having never seen one, a third said yes, a third said no, and the rest maybe. Ford stayed with three doors, while Chrysler, with a stronger gut sense of its buyers, went for the fourth. It came a smash hit, and it cost Ford \$560 million to catch up.

Now Nasser is pushing designers, engineers, and marketers to develop a similar kind of customer understanding. To shake his troops out of the old mind-set, they are sent

Consumer Insight Centers for a daylong course in which they are forced to listen to consumers and engage them in dialogue. From there, small teams are sent out for eight weeks to do "customer immersion."

So it was that Richard Parry-Jones, Ford's product development chief, found himself club-hopping in London one recent morning until 4 a.m. with about 20 teens and twentysomethings.

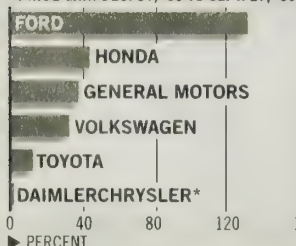
It made for an odd scene: Parry-Jones, 48, a Welsh-born man with thinning hair and a business suit, hanging out discussing music and fashion with a hairdresser and a clothes designer. Though Parry-Jones won't point to any specific changes that result from his nocturnal adventures, Nasser's hope is that getting customers in uninhibited settings, the car folks can get a better intuitive feel for what they want.

Touchy-feely? Sure. But it follows an approach Nasser championed three years ago to supercharge its truck fortunes. Then, a Ford designer and a consultant created generative "value groups" that translated the traits and tastes of customers from different age groups into car preferences. He used those insights to give the '97 F-150 pickup a softly scented front end and more passenger room. It bucked all notion of a successful truck but became a huge hit with baby boomers.

A natty dresser given to three-button Savile Row suits, Patek Philippe watches—one of his few hobbies is collecting Swiss watches—it's no surprise Nasser has focused on design. Although trained as a financial analyst, he has long stood

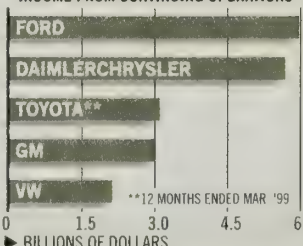
FORD'S STOCK LEADS THE PACK...

PRICE GAIN DEC. 31, '96 TO SEPT. 27, '99



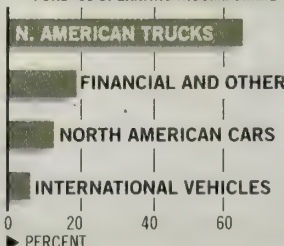
AND PROFITS ARE BOOMING...

INCOME FROM CONTINUING OPERATIONS



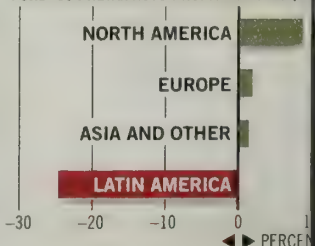
BUT MOST ARE COMING FROM TRUCKS...

FORD '98 OPERATING INCOME SHARE



AND OVERSEAS UNITS ARE STRUGGLING

FORD '99 PRETAX AUTO PROFIT MARGINS (%)



*BASED ON DAIMLER BENZ SHARES PRE MERGER. DAIMLERCHRYSLER SHARES POST-MERGER. DATA: BLOOMBERG FINANCIAL MARKETS, STANDARD & POOR'S COMPUSTAT, COMPANY REPORTS, MERRILL LYNCH & CO., WASSERSTEIN PERELLA SECURITIES

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entertain?

Where will they work?

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He combines financial smarts and instinctive product sense.

Those qualities brought Nasser to the fore in 1993 when he took over troubled European operations. He established that the overhaul would go far beyond head counts. Malcolm Thomas, then chief of the Mondeo car program, recalls their first meeting. "I expected a business review," he says. "What I got was Jac crawling all over the vehicle, poking here and there." He grabbed Thomas' hand and ran it over a rough plastic strip underneath the passenger seat. "Feel how sharp that is? A customer wouldn't like that," Nasser said. It was smoothed off immediately.

That was just the beginning. The European operation was short of cash to develop the tiny new Ka. Nasser suggested

shrink-wrapping the Ka's cute body around the existing Fiesta subcompact platform. Ford wound up selling 214,000 Kas in 1997. Combined with more cost slashing, Nasser lifted Europe into the black. So it made sense when Trotman tapped Nasser to head the new global product-development group in 1994. "Nasser came to Europe as an astute businessman," says Thomas. "What he demonstrated was ingenuity in creating product."

ELAN. Today, Nasser remains a frequent Saturday visitor to Ford's design studios. And Mays receives a steady stream of notes, photos, and sketches from his boss, inspired by everything from MTV to the Pebble Beach



FORD PAID \$1.6 BILLION FOR BRITAIN'S KWIK-FIT

classic-car show. "He might see the badges on some old cars and say, 'Gosh, why don't ours look that good?'" Mays says.

It takes three to four years for a new design to hit the showrooms, so the full force of Ford's new approach is a ways off. But Mays, who moved from Germany, brought a bevy of Europeans to the team and has made no bones about his intention to shake up the old guard. The 2001 Thunderbird will be the first major Mays-influenced Ford car. He simplified the design and made it "far more European." Volumes will be small, but Nasser is counting on the sleek coupe, which evokes the élan of the 1957 T-bird, to do for Ford what the Viper sports car did for Dodge—give sex appeal to a stodgy brand.



Nasser's Game Plan

NEW BLOOD

In a bid to juice up Ford's stodgy executive suite, Nasser has hired a slew of highly regarded managers from auto makers around the globe. He has also tapped top consumer-goods makers for marketing and sales talent. His all-star team is now considered among the industry's best.

CUSTOMER FOCUS

Nasser is pushing everyone from engineers to marketing staffers to get closer to customers rather than rely on second-hand market research. He's also backing innovative new ventures, such as Ford's recent stake in MSN's CarPoint Web site. Nasser's goal: to mine the site's data from online purchases to understand buyers better.

MORE AUTONOMY

Ford 2000, the five-year-old plan that centralized global decision-making, brought big cost savings but has hurt regional managers' ability to react to local markets. With problems brewing in Ford's international units, Nasser will launch a structural shakeup next year aimed at giving regional executives more power over car brands and marketing.

GOING FOR GROWTH

Nasser wants to boost Ford stock's price-earnings ratio from 9 to the 30 range enjoyed by consumer companies. So he's moving into higher-margin service businesses, such as quick-repair stations.

In the meantime, Ford is applying its customer insights to the marketing of new models already under way. Executives concluded that the offspring of baby boomers like product they can customize, for example. So when the \$12,280 Focus small car arrives in showrooms this month, buyers will be encouraged to personalize it with kitschy add-ons, such as a

package" for a few hundred dollars.

Yet even as Nasser concentrates on improving Ford's performance with cars, he is also facing far stiffer competition with trucks. That core franchise is now under siege from Japanese and German auto makers. This summer, Toyota launched the Tundra pickup, in a class with Ford's F-150 and the Chevrolet Silverado trucks. BMW will launch its X5 SUV in December.

And Toyota and Honda have jumped out ahead with car-based SUVs, the Lexus RX300 and Honda CR-V. The battle is likely to put big pressure on Ford's juicy margins.



WEB CARS: NASSER LINKS WITH CARPOINT

Nasser is convinced that the key to staying ahead now is providing upscale baby boomers with even more passenger-cabin versatility and macho good looks. So next spring, Ford will unveil the Explorer Sport and F-150 SuperCrew, vehicles that combine cabins with pickup beds. Then it will launch the Escape, a carlike SUV. The radically new vehicles show how designers are getting freer rein, says Dee Kapur, manager of Ford's pickups: "Ten years

ago, this would not have happened in our rigid command-and-control environment."

Rising truck competition isn't Nasser's only problem. He must also fix Ford's troubled overseas operations for good. He's tearing up some parts of the global structure Trotman put in place five years ago—known, ironically, as Ford 2000. Although huge cost savings have come from unifying such things as purchasing, engineering, and manufacturing globally, regional managers complain they've lost too much power over products. So next year, Nasser will give them more power to shape local brands and marketing.

The costs of weak local management have become all

"A wise man listens to advice."

— Proverbs 12:15

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clear. In Brazil, Ford has lost a stunning four points of market share since early '98 after government moves to slow capital flight sent interest rates skyrocketing. Other big carmakers worked quickly with dealers to arrange special customer financing, but Ford dallied, and its sales plummeted. "Management was stuck and didn't act quickly enough," says Diego Portillo, an analyst with Standard & Poor's DRI's global automotive group. Now, with a new head of its Brazilian unit in place, Ford plans to retire debt, repair its dealer network, and add a new small car.

Elsewhere, too, Nasser is pushing Ford to move aggressively. The topper came two weeks ago when Ford announced that it would invest an undisclosed amount in Microsoft's MSN CarPoint Web site. CarPoint will soon launch a "build to order"



insists Ford must evolve from a car company into "a leading consumer company for automotive products and services." The difference Nasser wants to expand beyond the \$20,000 a passenger car sells for. Over a decade Ford figures a car generates about \$68,000 in revenues—from the sales price to maintenance, spare parts, gas, and insurance. So last spring he tapped Ford's \$24 billion cash pile and paid \$1.6 billion for Kwik-Fit, a chain of nearly 2,000 auto-service centers in Britain. And in perhaps the strangest move of all, Nasser even bought a small junkyard business.

SCOFFING. In theory, these deals help Ford tap into service businesses with higher returns than manufacturing. Nasser and his team also claim they will provide more of that product through consumer feedback. Running a junkyard can provide valuable information about parts durability and reliability, says Michael



2000 JAGUAR S-TYPE

Synergy: Ford's two new luxury models share a platform



2000 LINCOLN LS

service that should let customers seek out exactly the color and features they want in a Ford. Although any orders will be filled by traditional dealers, CarPoint will sell aggregated customer data back to Ford. Nasser figures that could prove an invaluable, unfiltered view of what buyers—particularly the young ones on whom Ford's future depends—want.

Moreover, the Internet is just one part of a broader vision Nasser has of powering up Ford's sales growth and margins. To lift Ford's stock price—and boost its price-earnings ratio from 9, closer to GE's 36 or Procter & Gamble's 30—Nasser

D. Jordan, vice-president of Ford's customer service.

Still, rivals scoff at the notion these moves will pay off. "You don't have to own a rental-car company to learn about...the maintenance experience," says James E. P. executive vice-president for Toyota Motors Sales USA. A Japanese company's U.S. auto group. Investors, too, are uncertain. One large shareholder says Nasser's grand strategy strikes him as a rush to glory. "I told Jac, 'Become the best auto company in the world before you become the best consumer company in the world. Walk before

WHY THE UNIONS ARE STIRRED UP

Jacques A. Nasser's aggressive campaign to remake Ford Motor Co. may be playing well with investors and management gurus, but don't count the United Auto Workers among his fans. After negotiating fairly easy contracts with DaimlerChrysler Corp. and General Motors Corp., the union is turning its attention to Ford, where tension is building after two decades of peace.

The union is fuming over Ford's plan to lop off its \$18 billion parts unit, Visteon Automotive Systems. It fears that Visteon's 23,500 hourly workers will end up with lower wages and benefits than assembly workers.

Some of the friction can be blamed on personalities. Much of the long-standing goodwill between Ford and the union stems from trust between

UAW President Stephen P. Yokich and Ford Vice-Chairman Peter J. Pestillo, who handles labor relations. But this year, Nasser and another newcomer, UAW Vice-President Ronald Gettelfinger, are injecting their own forceful styles into the bargaining.

ANXIETY. Nasser's vigorous moves to put his stamp on the company—and an early talk in which he told UAW leaders they would have to consider a Visteon spin-off—have stirred anxiety. Says Alan Baum, an analyst at industry consultant INR Inc.: "The underlying issue is the rate of change at Ford. And Visteon becomes the obvious whipping boy."

Moreover, while GM's spun-off Delphi Automotive Systems and Visteon seem similar, the state of their parents makes all the difference to some

workers. GM had been starving parts plants of investment for years, so workers considered their prospects brighter under an independent Delphi. But Visteon employees are reluctant to give up their share of the wealth as Ford piles up the industry's biggest profits.

In the end, the UAW probably can't stop the spin-off. But negotiators are prepared to butt heads with Ford to protect Visteon jobs, wages, and benefits. A strike can be averted, says Dan Luria at Michigan Manufacturing Technology Center, if Ford agrees to keep a handful of powertrain and stamping plants under its umbrella. Even in the new Ford, old-fashioned horse trading may prove to be the most effective bargaining tool.

By Joann Muller in Detroit

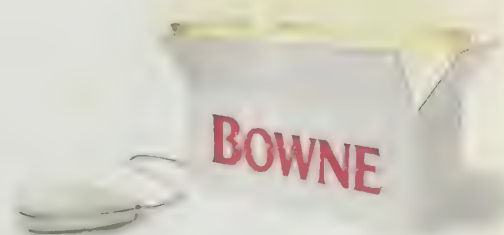
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run.” Nasser’s response? “He chewed me out,” says the investor.

Nasser discounts such critics. “They just don’t get it. They’re back in the nuts-and-bolts age,” he huffs. For now, he has the support that counts most: that of Chairman William C. Ford Jr., who represents the Ford family, the controlling shareholder. By staying close to the core business, Ford sees a big difference between Nasser’s move into repair shops and the company’s disastrous diversification into banking and other nonauto businesses in the ’80s. And he notes that the board has “never said no to Jac because, frankly, we’ve bought into the strategy.” Still, Ford’s directors want Nasser to explain his long-term plans in greater detail. So they have made plans for a



boot camp, I’ll survive.’ But the boot camps just keep ing.” Indeed, few expect Nasser to let up on the acceleration anytime soon. He has spent a career propelling himself ward at maximum speed. Now, this restless outsider is taking the entire company along on the ride.

By Kathleen Kerwin, with Keith Naughton, in Dearborn, Mich., with bureau reports

EUROPE: WHERE FORD NEEDS TO STEP ON THE GAS

Ford Motor Co. brought an impressive stable of brands to the Frankfurt Auto Show last month: Jaguars, Volvos, Mazdas, even Aston Martins. Just one thing seemed to be missing: Fords. Cars carrying the trademark oval huddled in a corner of Ford’s exhibition space, next to the espresso bar and the free food, far from center stage.

The placing was all too symbolic of the fate of Ford-brand cars in Europe. Ford’s product line grew stale under a corporate structure that centralized too much power thousands of miles away at Dearborn (Mich.) headquarters. The No. 2 auto maker in Western Europe five years ago—General Motors Corp.’s Opel/Vauxhall was No. 1—Ford slipped to fourth this year. Its market share fell from 11.7% in 1994 to 9.3% in 1999. Still the best-selling brand in Britain, Ford is elsewhere in danger of becoming an also-ran.

If CEO Jacques A. Nasser wants to make Ford the world’s biggest car company, he’ll have to deal with Europe. Analysts expect Western Europeans to buy more than 15 million cars this year, right behind the U.S. To catch up, Ford will have to invest big-time, expanding its product line—even as declining real prices and overcapacity hurt margins.

Under the Ford 2000 orga-



FORD’S EURO CHIEF

Nick Scheele “understands European customers as few others do,” says his Opel rival

nization set up five years ago, Ford centralized much product development and marketing. As a result, designers didn’t focus enough on making cars specifically for Europe, says John R. Lawson, an auto analyst at Salomon Smith Barney.

Now, Nasser is moving to give regional managers more input. Nick Scheele, 55, who took over as Ford of Europe’s president in July after heading Jaguar, vows new designs that will give the line more identity. Ford of Europe recently moved its headquarters to

Cologne, partly to cash in on the esteem consumers have for German engineering. And Scheele is trimming capacity, converting a plant near Liverpool to produce Jaguars instead of Fords.

The good news for Ford: Its new Focus line of small cars is a hit, selling half a million models a year. In Germany, the Focus compact sedans, hatchbacks, and station wagons have sold 73% more this year than the Escort line they replaced. Magazines praise the Focus’ combination of interior room, handling, and new wave styling. And in a break with its recent past in Europe, Ford

kept up marketing pressure after the launch. “We have to do that across the board,” says Scheele.

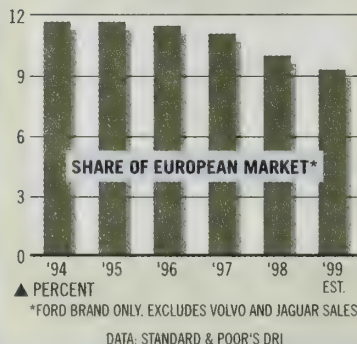
Mindful that Scheele doubled sales during his seven years as CEO of Jaguar by making the cars’ reliability match their good looks, competitors are bracing for a counteroffensive by Ford. “He understands European customers as few others do,” says Robert W. Hendry, CEO of Opel. “I expect Ford to prosper.”

But rivals have a big head start. Renault’s Scenic microvan, launched in 1996, was a runaway hit for which Ford had no answer. Volkswagen’s midsize Passat, redesigned in 1996, invaded turf occupied by Ford’s Mondeo. And Mercedes’ snub-nosed \$28,000 A-Class brought the prestigious brand into Ford’s territory.

Scheele says Nasser is giving him a free hand and no stated deadline to turn things around. But, he adds with a smile, “Jac is quick, and he expects everyone else to be quick.” Alas, quickness is the thing Ford of Europe has so far lacked.

By Jack Ewing in Frankfurt

FORD FADES OUT



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RETHINKING WALL STREET

What do a for-profit NYSE and Nasdaq mean for investors?

Wall Street is in turmoil these days—and it has nothing to do with stock prices. The big bourses are changing radically and rapidly. Both the New York Stock Exchange and Nasdaq plan to convert to shareholder-owned, for-profit companies, the better to meet head-on competition from electronic trading systems. On Sept. 23, *Securities & Exchange*

A: Two things: regulation and technology. After a 1994 price-fixing scandal at Nasdaq, the SEC and the Justice Dept. forced the market to admit new competitors. That move, by a fluke of history, came just as an electronic revolution was exploding in stock-trading. Powerful networks are taking over functions once handled by legions of brokers. Buy stock through an online bro-

dealers who drive trading by providing quotes for stocks—were caught on browbeating competitors to maintain wide spreads between the bid [buy] and ask [sell] prices. In the scandal's wake, the SEC in 1997 imposed new rules to dictate how dealers should handle customer orders. Dealers who receive so-called "limit orders" to buy or sell shares at specified prices can no longer ignore them. And the SEC created a new option: Dealers can route limit orders to nine ECNs, where orders are matched automatically. Computer trading at ECNs—especially Reliance Group PLC's Instinet Corp.—has gained favor with institutions, unlike the anonymity it provides their orders.

The next step: The SEC decided in April that ECNs could become stock exchanges. Two—Island ECN, owned by Datek Online Holdings, and Archipelago Holdings, backed by an all-star roster of Wall Street firms—have applied

THE PLAYERS AND THEIR POSITIONS

Wrenching change is in store for both old hands and new entrants to the trading game



NYSE The senior U.S. market has shielded itself through Rule 390, which prohibits members from trading stocks away from the NYSE floor. But thanks to strong pressures from the SEC and competitors to reform itself, NYSE Chairman Richard Grasso is moving to issue its shares next year to public investors.

NASDAQ Nasdaq market makers have lost 30% of their trading volume to electronic communication networks (ECNs). To recoup, Nasdaq CEO Frank Zarb wants to enlist 5,000 small broker-members to convert to a for-profit exchange via a private stock placement. Eventually, Nasdaq may do an initial public offering.

ECNs ECNs are grabbing order flow from Nasdaq. Island ECN and Archipelago are picking up business from online traders and aspire to become big Wall Street firms. The problem: ECNs are matching buyers and sellers internally, exposing them to the broad

Commission Chairman Arthur Levitt Jr. laid out his vision: He urged the NYSE and Nasdaq to merge their regulators and to build a central "order book" to link investors when stocks are traded in different markets. Washington Correspondent Mike McNamee sorts out the equity markets' revolution.

Q: What's driving the changes on Wall Street?

ker, and if the broker's computer finds a seller in an electronic communications network (ECN), your order will be executed with no human intervention, at a fraction of the previous cost. And computers never sleep—opening the way for trading before and after the traditional 9:30 a.m.-to-4 p.m. market day.

Q: What caused this historical fluke?
A: Greed. Nasdaq market makers—

Q: What has this meant for investors?
A: Lower prices, faster trades, better service, and more competition. Sprague says the SEC. Online investing has taken off. "In the past year, more than 3 million new online brokerage accounts opened, and the average commission cost of a retail stock trade dropped to \$77," says Frank G. Zarb, CEO of the National Association of Securities Dealers.

SEC wants all markets linked to ensure that investors get the best prices on trades—and regulators de-linked to ensure clean oversight

SECURITIES & EXCHANGE COMMISSION CHAIRMAN LEVITT

which owns Nasdaq. That's down \$125.

Additional brokers like Merrill Lynch are slashing their prices to compete with online rivals. Americans who trade indirectly—through mutual funds, pensions, and insurers—will also reap savings. "Right now, if I try to place an order to buy stock in New York, there are eight people between me and the seller," says Harold Bradley, senior president of mutual-fund adviser American Century Investment Management. Electronics will also make it easier for U.S. markets to draw foreign investors and investors.

It proliferating trading platforms

bers started taking an interest. "By investing in an ECN, we're getting the [bourses'] attention," says the chief equity trader for a big Wall Street firm that has taken a stake in Archipelago.

Indeed they have. NASD's board is expected on Oct. 7 to firm up plans to "demutualize"—converting Nasdaq from a member-owned collective to a shareholder-owned, for-profit exchange. After first pledging to take the Big Board public by Thanksgiving, NYSE CEO Richard A. Grasso now says he'll be selling NYSE shares sometime next year.

Q: What do the bourses gain by going public?

A: Flexibility, better relations with their members, and capital. Both markets suffer from cumbersome structures. NASD's membership is dominated by 5,000 small brokerages. The NYSE is ruled by 1,366 members, 63% of whom are absentee landlords leasing out their seats. The result, Grasso says, is "strategic gridlock"—a problem that nimble, for-profit ECNs don't face.

With stock to distribute, the markets can reward key players. Zarb says he'll give stock to big members so that ECN backers like Merrill Lynch and Goldman, Sachs & Co. will have a financial stake in bringing business back to Nasdaq. Both markets also face heavy capital demands to update their '70s-vintage electronic underpinnings.

Q: This is a sweeping change. Isn't it controversial?

A: Surprisingly, no. Not only do the NYSE and Nasdaq like the idea, but so do Republicans and Democrats. "There's clearly a consensus for demutualization," Senate Banking Committee Chairman Phil Gramm (R-Tex.) declared after a Sept. 28 hearing.

Q: Where has the SEC been?

A: Watching and waiting. Levitt wants to let markets set their own direction. But in his Sept. 23 speech, the SEC chief laid down some markers. To encourage innovation, he wants markets to vigorously compete for orders—rather than, say, allow the Big Board to enjoy ex-



clusive trading in stocks of NYSE-listed companies. But competition has its limits: All markets must be linked, Levitt says, to ensure that investors get the best price on trades.

Q: How should the marketplace be regulated?

A: Since the SEC was formed in 1934, it has relied on exchanges and NASD to set their own trading rules, investigate customer complaints, and watch for market manipulation. That system has given the U.S. the world's cleanest markets. But can a market regulate itself when it's under pressure to deliver profits? Levitt is skeptical that exchanges' regulatory arms can function inside for-profit companies. "Strict corporate separation of the self-regulatory role from the marketplace it regulates is a minimum" in a for-profit exchange, Levitt says, adding that markets might also combine many supervisory jobs in one industrywide unit.

That's fine by Zarb, who is separating NASD's cops from Nasdaq and has long urged a "superregulator" merger for all markets. But Grasso disagrees. For the NYSE, he says, regulation is "an investment in our brand, building the confidence that inspires investors." Just as important, the NYSE's ability to audit big brokerages' books gives it leverage over Wall Street's powerhouses.

The regulation issue is shaping up as the key political fight of the markets' transformation. Levitt could hold up the NYSE's stock offer until it spins off its regulators. But several key lawmakers—including Gramm—are already lining up to back the Big Board.

Q: What will the shape of the future trading markets look like?

A: By breaking down exclusive franchises, the SEC hopes to promote com-



MAY SHAKE OUT

Markets will tie players together: A stock in the NYSE would be exposed to ECN traders. But markets could opt as if they were able to match orders. Some ECNs could handle fast retail while others could accept big institutional orders that need special attention. Experts say the NYSE, Nasdaq, and two to four ECNs might thrive.



end to fragment the market. If your limit order to buy a Nasdaq stock isn't the highest bid at a market maker or ECN, your order won't be revealed to traders elsewhere—so it languish or never get filled.

How have traditional markets reacted?

Nasdaq and the NYSE didn't worry about ECNs until their big mem-

petition between marketplaces. An investor could direct her order to buy stocks to an ECN for superfaster execution. Or she could send it to the NYSE, where a floor trader might be willing to shave a few cents off the price per share. A mutual fund could spread its sell orders across several markets to avoid tipping its hand.

But competition invites fragmentation. To fulfill his goal of linking all markets, Levitt wants the bourses to create and share "limit order books"—electronic systems where limit orders from different markets can be shown. Investors in all markets could tap into these displays to ensure that they're getting the best prices.

The order book's design is critical. If every order has to go into a central book, the order book would supplant the separate markets. Result: Competition would wither. Nasdaq officials see that happening in Europe. SEC officials say they'll accept some inefficiency to preserve competition. So the SEC is likely to approve multiple order books specializing in different stocks. They'll also let ECNs continue to match orders internally. Nasdaq is expected to announce its own version of a central limit-order book by Oct. 7.

Q: Who will be the key players?

A: The NYSE and NASDAQ enjoy strong reputations and name recognition around the world. Both will remain central to the new markets.

Market analysts and SEC officials expect most of today's nine ECNs to consolidate or be swallowed by the major markets. Instinet, which commands 50% of the shares that trade on ECNs, is repositioning itself as a specialty broker for institutions rather than as an order-matching network. Island, with 20% of ECN volume, and Archipelago, with 8%, will thrive, thanks to strong links with brokers that send them lots of orders, says Octavio Marenzi of Meridien Research, a Newton (Mass.) technology consultant.

Q: How certain are all these reforms?

A: When change depends on the politics of stock exchanges, regulators, and Congress, nothing can be certain. Details of the new markets are still up for grabs. But stock trading's restructuring is being fueled by cheap electronic communications and steep global competition—forces that few businesses have been able to ignore. Stock exchanges aren't likely to be exceptions.

*With Paula Dwyer
in Washington*



HOMEGROWN: Chase has developed its own debt underwriting business

BANKING

CHASE: BUILDING 'BRICK BY BRICK'

The Hambrecht & Quist deal beefs up investment bank

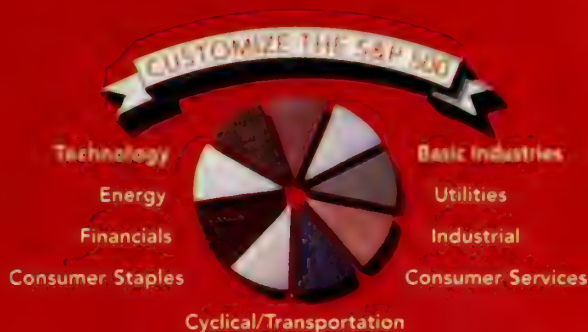
For years, Wall Street has buzzed with rumors that Chase Manhattan Corp. would merge with a major investment bank such as Merrill Lynch & Co. On Sept. 28, Chase made a move. But, to the surprise of many, it acquired Hambrecht & Quist, a relatively small San Francisco-based investment bank that specializes in high-technology stock offerings. The price: \$1.35 billion, a far cry from the tens of billions that Merrill might have sold for.

The deal was quintessential Chase, and a revealing glimpse of the emerging style of William B. Harrison, who took over as chief executive in June. He had long known that Chase needed to get into the equities business. But the courtly North Carolina native was maintaining the Chase tradition, inherited from his predecessor Walter V. Shipley, of building investment-banking operations piece by piece. The bank has developed its own powerful debt underwriting and merger advisory businesses, often hiring Wall Street pros. By acquiring H&Q,

Chase is again taking it slow, picking a smaller equity underwriter that should be easier to absorb. "We have demonstrated patience," says Harrison. "We will continue to demonstrate patience."

But on the other hand, Harrison is staking out new territory. Since taking over as CEO, Harrison has moved quickly to expand Chase's Internet presence. H&Q is another step in that direction. Indeed, Chase officials maintain they see the deal more as a move into the high-tech arena than the long-anticipated plunge into equities. "It's a great opportunity for us to further participate in the New Economy," Harrison says. "This is going to make us smarter about technology and the Internet."

Whether this combination of payment empire building and soaring high-tech ambitions will satisfy investors is another question. But as is usually the case with Chase, the downside is limited. "It's a way for Chase to get its feet wet in equities," says Michael Mayo, banking analyst at Credit S



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First Boston. "There's always the question of whether they are being too conservative and missing out on opportunities."

To be sure, it's hard to say that Chase's approach to investment banking has been entirely its own choice. In recent years, reports have described merger talks not only with Merrill but with such firms as Goldman Sachs and Morgan Stanley Dean Witter. Chase officials always declined public comment on such merger speculation.

CULTURE CLASH. However, it can be said that Chase hasn't been hurt much by its failure to pull off a big equities deal. While competitors such as Citigroup and Bank of America Corp. have struggled with the challenge of getting investment bankers and commercial bankers to work together, Chase has increased its investment banking revenues and avoided corporate-culture clashes. Indeed, Chase officials like to point out that last year, the company made \$3.3 billion from its business-banking services, more than comparable businesses produced at Morgan Stanley, Goldman, Citigroup or Merrill Lynch.

The key to Chase's incremental approach to building its investment bank has been its dominant position in syndicated lending, a business headed by Chase's resident rainmaker, Vice-Chairman James B. Lee Jr. Realizing that distributing pieces of loans isn't much different from selling bonds, Lee has moved Chase aggressively into debt underwriting. So far this year, Chase ranks third in selling investment-grade bonds and third in dealing junk bonds, according to Thomson Financial Securities Data. In turn, Chase has used its understanding of corporate balance sheets to squeeze into ninth place among M&A advisers.

In buying Hambrecht & Quist, Chase is repeating its practice of using one successful business as a basis for building another. Already, Chase's venture-capital arm, Chase Capital Partners, has become a leading provider of seed capital for high-tech firms. From 1998 through the end of August, Chase Capital Partners has reported investment gains of nearly \$2 billion. But it has been frustrating for Chase to watch competitors with equity capabilities earn underwriting fees by taking companies like GeoCities and Stamps.com Inc. public after Chase had discovered them.

Says Harrison: "We have been giving some other investment banks some wonderful business."

Hambrecht & Quist will give Chase a chance to use its leads in the high-tech world to produce equity underwriting fees. And it will enable Chase to arrange debt financing for companies that H&Q has helped go public. "This is incredibly consistent with how we have grown in-



CORPORATE TIES: Chase's Harrison (left) and Lee (center) want to leverage the tech business Case built up at H&Q

vestment banking—brick by brick," says Lee. "Our view of the New Economy is what drives this transaction."

Daniel H. Case III, H&Q's chairman and CEO, says joining Chase will help his operation compete for bigger pieces of high-tech offerings. Increasingly, large Wall Street competitors have been taking away business from H&Q in Silicon Valley by offering other services and products. So far this year, Hambrecht & Quist has ranked ninth in leading high-tech initial public offerings, according

The Chase Is On

The third-biggest bank hopes to use Hambrecht & Quist to build up its investment banking power

1999 RANKINGS:	CHASE	H&Q
SYNDICATED LENDING	1	NA
INVESTMENT-GRADE BONDS	3	NA
HIGH-YIELD BONDS	3	NA
EQUITY IPOs	NA	12
HIGH-TECH IPOs	NA	9
MERGERS AND ACQUISITIONS	9	29

NA, NOT APPLICABLE
DATA: THOMSON FINANCIAL SECURITIES DATA

to Thomson Financial Securities Co. With Chase, Case says H&Q will be able to respond more effectively to challenge from rivals. "Chase is the ideal strategic partner for us," he says.

That Harrison would build his ties business on a high-tech base is to form. Scarcely two weeks after taking over as CEO, Harrison set up Chase.com to coordinate the com-

Internet operations. Then, joined with Wells Fargo and First Union Corp. in a venture that would route business to consumers through cyberspace. It marked an aggressive attempt by banks to battle against nonbank competitors who could conceivably provide corporate cash management services of their own.

Harrison even introduced the Silicon Valley tradition of Friday's to Chase. And the tough sell at a company where a senior executive cornered that his idea of casual is leaving his French cuffs in his closet. **GO WEST.** In absorbing Hambrecht & Quist, Harrison needs all the cultural sensitivity he can muster. The financial landscape is littered with carcasses of investment banks that were taken over by commercial banks and then

their dealmaking talent walk out the door. To keep H&Q executives, Chase has set aside \$200 million in stock to pay them. And while Lee will remain head of Chase's investment banking operations, Case will serve as chairman and chief executive of Chase Securities West, as H&Q will be known as head of Chase's Global Technology Group.

"It's going to be a real challenge for Chase to realize the full potential of H&Q because of the proverbial culture clash," says Michael A. Flanagan, analyst at Financial Service Analysts in Fort Washington, Pa. "But I'm not predicting failure." Chase, after all, has a reputation of being a good integrator, he says.

And if Chase can get the hang of equity business at a smaller shop, H&Q, it will be all the better positioned to make a bigger equities deal on the road. Note that Case is heading Chase Securities West. There is no Chase Securities East, North or South. But if that's going to happen, chances are Harrison will take his

By Gary Silverman in New York
with Louise Lee in San Mateo, Calif.

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MUTUAL FUNDS GO TOPSY-TURVY

Longtime losers—gold and Japan—are posting big numbers. And biotech looks sharp

For the second year in a row, the third quarter has turned out to be one ugly stretch for mutual fund investors. The Standard & Poor's 500-stock index peaked in mid-July and the Dow Jones industrials in August, and it has been downhill since. Bond prices have been sinking, as has the dollar. For the quarter through Sept. 27, the average U.S. diversified equity fund showed a negative total return: -5.58%, vs. -6.31% for the S&P 500. Equity funds as a whole fared a little better, falling just 3.69%.

S&P 500 index funds, so popular and rewarding for so long, were no place to be in the past few months. Of the 27 categories of equity funds tracked by Morningstar Inc., all but seven beat the S&P (table, page 156). Value funds, which came to the fore early in the second quarter, fell behind again, thanks in large part to sinking financial stocks. Banks, brokers, and insurance companies fell victim to higher interest rates, earnings shortfalls, and a slowdown in mergers and acquisitions. That gave financial funds the quarter's worst performance. "Financial stocks are awfully attractive relative to the rest of the market," says Jeffrey Morris, portfolio manager of Invesco Financial Services' fund, down 16.59% for the quarter. "But I just don't know what the catalyst will be to get them moving again."

"BAD QUARTER." Losses in financial stocks wreaked havoc on Vanguard Windsor II, down 13.86%, and made it the worst-performing of the Big 10 equity funds (table, page 154). Another factor likely stemmed from the 64% decline in Waste Management Inc., one of the fund's ten largest holdings at the start of the quarter, says Dan Wiener, editor of *The Independent Adviser for Vanguard Investors*. "There's been no

The Best Performers		Gold funds sparkle now—but for how long?	
	TOTAL RETURN*		TOTAL RET
AMERICAN CENTURY GLOBAL GOLD INV.	31.23%	STRONG ENTERPRISE	19
EATON VANCE GREATER INDIA B	30.80	OPPENHEIMER GOLD & SPECIAL MINERALS A	19
FIDELITY JAPAN SMALL COMPANIES	29.52	LEXINGTON GOLDFUND	19
U.S. GLOBAL INVESTORS GOLD SHARES	28.65	VAN WAGONER EMERGING GROWTH	19
U.S. GLOBAL INVESTORS WORLD GOLD	28.50	SCUDDER GOLD	19
FIDELITY SELECT PRECIOUS METALS & MIN.	28.48	RYDEX BIOTECHNOLOGY INV.	18
GABELLI GOLD	27.46	VAN WAGONER MICRO-CAP	18
VAN ECK GOLD/RESOURCES A	26.67	MSDW PRECIOUS METALS & MINS. B	18
MONTEREY OCM GOLD	25.55	HOMESTATE YEAR 2000	18
FIDELITY JAPAN	25.49	T. ROWE PRICE INTERNATIONAL DISCOVERY	18
WARBURG PINCUS JAPAN SM. CO. COMM.	25.48	BENDER GROWTH C	18
DEUTSCHE JAPANESE EQUITY A	25.42	NORTHSTAR SPECIAL B	18
FIDELITY SELECT GOLD	25.06	GOLDMAN SACHS JAPANESE EQUITY A	18
EVERGREEN PRECIOUS METALS A	24.65	INVESCO GOLD	17
WARBURG PINCUS JAPAN GROWTH COMM.	24.14	OPPENHEIMER REAL ASSET A	17
JAPAN	23.91	RED OAK TECHNOLOGY SELECT	17
SOGEN GOLD A	23.16	WRIGHT EQUIFUND-JAPAN	17
FRANKLIN BIOTECHNOLOGY DISCOVERY A	22.70	AXP PRECIOUS METALS A	17
RYDEX PRECIOUS METALS	21.96	BLACKROCK MICRO-CAP EQUITY INV. B	16
FRANKLIN GOLD A	21.61	VANGUARD GOLD & PRECIOUS METALS	16
MONTEREY MURPHY NEW WORLD TECHNOLOGY	21.39	VAN ECK INTL. INVESTORS GOLD A	16
NEVIS	20.85	FIDELITY PACIFIC BASIN	16
LIBERTY-NEWPORT JAPAN OPPORTUNITIES B	20.24	T. ROWE PRICE JAPAN	16
PIONEER GOLD A	19.90	RESERVE SMALL-CAP GROWTH R	16
USAA GOLD	19.57	DRESDNER RCM GLOBAL TECHNOLOGY I	16

*Appreciation plus reinvestment of dividends and capital gains before taxes, July 1 through Sept. 27, 1999

DATA: MORNINGSTAR, INC.

sea change in the way the fund is managed," says Wiener. "It's just been a bad quarter." All told, six of the megafunds beat the S&P, including Vanguard 500 Index, which inched out its benchmark by a few basis points.

The volatile market and souring fund performance are taking their toll on investors, who are slowing contributions and stepping up redemptions. Industry-

wide, cash inflows for the Jan through-August period are down from last year and 31% from the reset in 1997. Robert L. Adler of Data Services, which tracks cash into funds, says in five of the past weeks more cash came out of funds than went in.

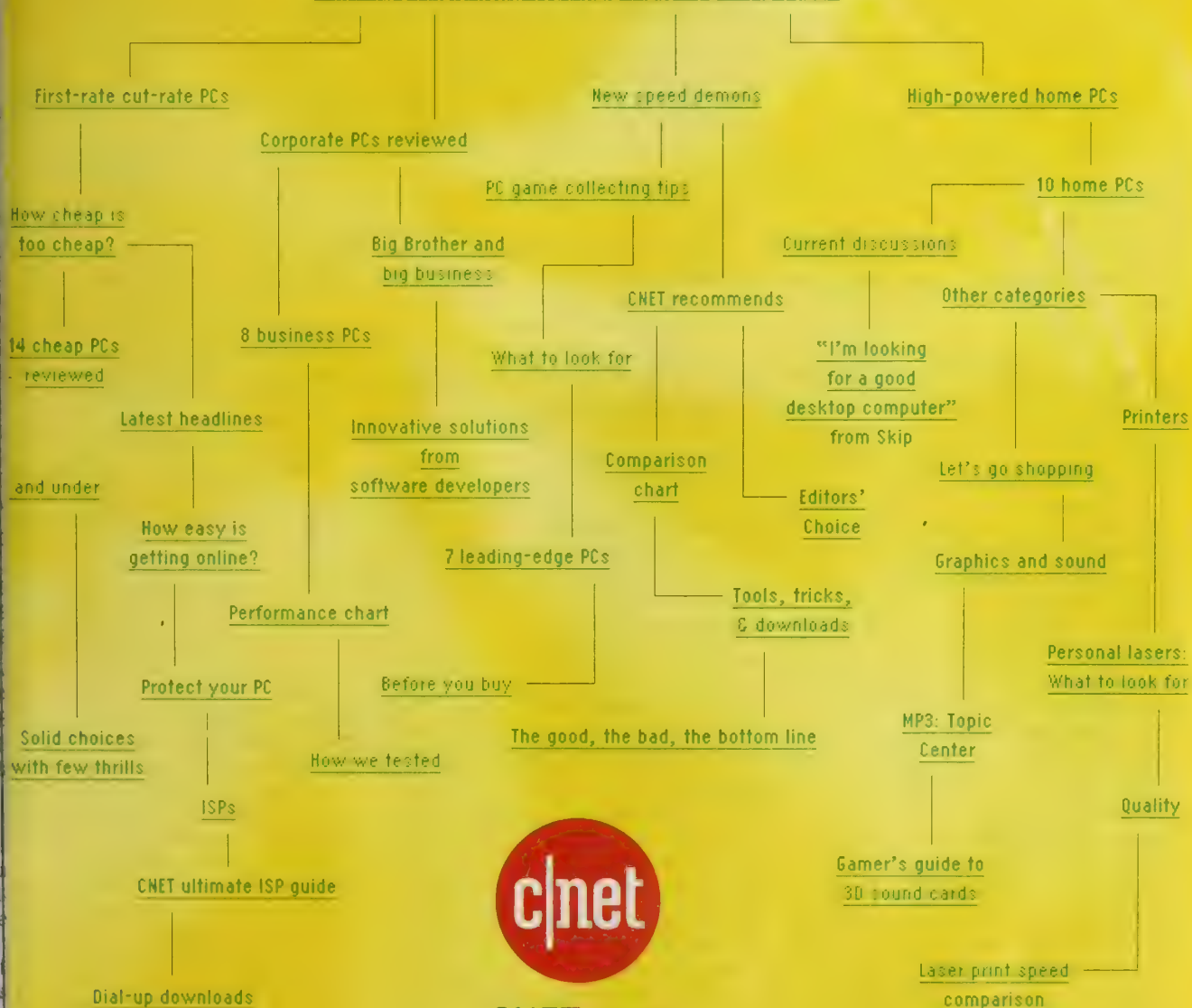
About half of the cash inflow to technology and large-cap, mainl-

Higher interest rates and earnings shortfalls turned financial funds into the quarter's worst performers

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500, index funds. Tech funds are still on a roll, up 7.85%, and in fact they picked up momentum toward the end of the quarter even while the overall market went downhill thanks to Net stocks. But Adler worries about index funds. Actively managed funds now have 4.8% of assets in cash, but indexers have none. So if redemptions someday outpace inflows, the funds have no choice but to sell stocks. Says Adler: "In a declining market, that would be like throwing gasoline on a fire."

Bond funds offered some refuge, but investors would have been better served by a money-market fund. Taxable bond funds had slightly negative total returns for the quarter, -0.04%, with the best showing coming from short- and ultrashort-term funds. International bond funds that don't hedge their foreign currency exposure also benefited as the yen and euro gained against the dollar. But tax-free bond funds performed even worse than taxables, down 1.26%.

GLITTERING GOLD. If anything, the quarter's results reinforced the principle of diversification among fund categories. Just look at the precious-metals funds,

How the Big Funds Fared

FUND	NET ASSETS BILLIONS	TOTAL RETURN*
FIDELITY MAGELLAN	\$93.6	-6.20%
VANGUARD 500 INDEX	91.1	-6.25
WASHINGTON MUTUAL INVESTORS	55.5	-9.59
INVESTMENT COMPANY OF AMERICA	52.1	-6.87
FIDELITY GROWTH & INCOME	47.6	-6.64
FIDELITY CONTRAFUND	41.3	-5.03
AMERICAN CENTURY ULTRA INVESTORS	33.5	-5.11
VANGUARD WINDSOR II	32.4	-13.86
JANUS	31.9	-2.74
VANGUARD WELLINGTON	26.3	-5.32

*Appreciation plus reinvestment of dividends and capital gains before taxes, July 1 through Sept. 27, 1999
DATA: MORNINGSTAR, INC.

an all-but-forgotten investment for most of the past five years as deflation and central bank bullion sales hammered their price down. On Aug. 25, gold traded at \$252.55 an ounce, the lowest price in two decades and just slightly above the average cost of production.

But in late September, 15 central

banks said they would not sell gold over the next five years beyond the 2000 tons already scheduled to be sold. That moved fears of additional supply. Bullion prices jumped to \$308 in two days, but mining stocks jumped. That made gold funds the winners for the quarter, not necessarily a great dealing forward. "At this point, stocks are fairly valued relative to gold," says Bill McCall, portfolio manager for American Century Global Gold investors, up 31.23%, the performing fund for the quarter. "To go higher, prices will have to make other gains, and that's going to be tough. People are sure

that these prices will even stick."

Funds that invest in Japan were other big winner for the quarter, 17.16%. For a long time, they were much more popular than gold funds, even though the Tokyo stock market has sparkled for most of the year. Strengthening yen made these funds look even better. Still, relatively few fund investors shared in this move. U.S.-based mutual funds investing in Japan have assets of just \$6 billion.

This is not the first time the Japanese stock market rallied during its decade-long bear market, of course. And the rally subsequently proved to be a start. But this time really is different, portfolio managers insist. "The economic picture is positive," says Seung Kwak, manager of the \$1 billion Japan Fund. "The fiscal stimulus, and banks are in a better shape than they have been in years." Todd Jacobson, co-manager of two Warburg Pincus funds that invest in Japan, adds that Japanese companies are finally starting to do what their counterparts did a decade ago: restore focus on earnings growth, and add value for shareholders.

There's more than one way to ride Japan's rebound. T. Rowe Price International Discovery Fund is shining again—up 18.5% this quarter and 57% year-to-date—thanks, in part, to a stake in Japanese small-company stocks the fund established last November. "They were just too cheap to ignore," says Justin Thomson, the fund's portfolio manager. Thomson, who took over the small-cap fund a year ago, dropped the fund's emerging market stocks altogether, except for those in India. "That's the one emerging market where smaller companies actu-

The Worst Performers

Value and financial funds scrape bottom

	TOTAL RETURN*		TOTAL RETURN*
IAI VALUE	-32.87%	ALLIANCE GLOBAL ENVIRONMENT A	-16.30%
LEXINGTON TROIKA DIALOG RUSSIA	-31.40	FIDELITY SELECT BROKERAGE & INVESTMENT	-16.26
FIDELITY SELECT ENVIRONMENTAL SVCS.	-30.14	RAINBOW	-15.93
MUNDEN BALANCED B	-25.00	VAN KAMPEN VALUE B	-15.77
RYDEX TRANSPORTATION INV.	-21.42	SCUDDER FINANCIAL SERVICES	-15.65
AMERICAN REGIONAL EQUITY PREM.	-20.19	GALVET CAPITAL ACCUMULATION A	-15.44
RYDEX BANKING ADV.	-19.76	BOOGES	-15.43
SMITH BARNEY CONTRARIAN B	-19.53	FIRST AMERICAN MID CAP VALUE A	-15.42
MONTGOMERY EMERGING ASIA B	-19.51	CAROLINAS INV.	-15.42
PILGRIM MIDCAP VALUE B	-19.46	AMERICAN HERITAGE	-15.38
CENTURY SHARES	-18.65	MSOW VALUE B	-15.36
ALPINE U.S. REAL ESTATE EQUITY Y	-18.53	FIDELITY SELECT BANKING	-15.21
GRM LARGE CAP VALUE INV.	-18.16	HOMESTEAD VALUE	-15.19
MSOW MID-CAP DIVIDEND GROWTH B	-17.89	NEUBERGER BERMAN GUARDIAN	-15.09
FIDELITY SELECT MEDICAL DELIVERY	-17.80	VONTOLB U.S. VALUE	-14.98
STRONG SCHAFFER VALUE	-17.78	JOHN HANCOCK FINANCIAL INDUSTRIES B	-14.96
HEARTLAND MID CAP VALUE	-17.57	1838 SMALL CAP EQUITY	-14.94
RYDEX FINANCIAL SERVICES INV.	-17.36	VISION GROWTH & INCOME	-14.90
C&M FOCUS	-17.23	HOTCHKISS & WILEY SMALL CAP	-14.89
FAIRWEATHER FINANCIAL SVCS. GROWTH A	-16.75	PHOENIX-ENGEMANN VALUE 25 A	-14.86
T. ROWE PRICE FINANCIAL SERVICES	-16.66	PACIFIC ADVISORS SMALL CAP A	-14.80
FIDELITY SELECT INSURANCE	-16.60	GALVET NEW AFRICA A	-14.75
INVESCO FINANCIAL SERVICES	-16.59	OAK VALUE	-14.74
ROULSTON GROWTH & INCOME	-16.59	FIDELITY SELECT AUTOMOTIVE	-14.73
LONGLEAF PARTNERS	-16.57	BARON ASSET	-14.68

*Appreciation plus reinvestment of dividends and capital gains before taxes, July 1 through Sept. 27, 1999

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India, with its equity-friendly climate, shaped up as the best play in emerging markets

have intellectual property and add value," says Thomson, who has about 7% of the fund's assets in India.

Those who own Eaton Vance Greater India B know what Thomson is talking about, and then some. The fund, up 30.8% for the quarter, is a pure play

more companies are delivering positive earnings surprises, and acquirers are paying good money to buy them," says Kurt von Emster, portfolio manager of Franklin Biotechnology Discovery A, up 22.7% for the quarter. Biotech investments, along with high tech, are also

ager wants exposure to health

On the bond-fund side, it's a lot easier for portfolio managers to start. But Margaret D. Patel, portfolio manager of the Third Avenue High Yield Fund, managed to do it, achieving 4.42% total return for the quarter, compared to a -2.03% return for the average yield fund. Her secret weapon: "convertibles," convertible bonds whose underlying stock price is so low that the conversion feature is essentially worthless. If the underlying stock recovers, however, these bonds could be a lot. If not, the bonds still pay high interest. The key, she says, is to identify the bond where the underlying is going to get a whole lot better. Patel tripled my money on some convertibles, says Patel. "That would not have happened with a regular high-yield bond."

But lately Patel, who has moved from Pioneer Funds but continues to manage Third Avenue, has been shifting from busted convertibles to regular Treasuries. The allure: The high-yield premium Treasuries is five percentage points. If the premium holds, the bonds should deliver about 10.5% over the next "which, until four years ago, used to be considered an equity-like return. In other quarters or two like the last, and it may be a return that equity shareholders would be glad to earn."

By Jeffrey M. Lader
in New

The Best Bond Funds

TAXABLE FUNDS		TAX-FREE FUNDS	
	TOTAL RETURN*		TOTAL RETURN*
THIRD AVENUE HIGH-YIELD	4.42%	HIGHMARK CA. INTERM. TAX-FREE BOND A	1.11%
STRONG INTERNATIONAL BOND	4.04	CALIFORNIA INVESTMENT CA. INS. INTERM.	1.07
MUNDER INTERNATIONAL BOND A	4.01	FRANKLIN CA. INTERM. TAX-FREE INCOME	0.79
LEGG MASON GLOBAL GOVT. PRIM.	3.69	CALVERT TAX-FREE RES. LIMITED-TERM A	0.71
ABN AMRO INTL. FIXED-INCOME COMM.	3.43	PAYDEN & RYSEL SHORT DURATION T/E R	0.71
MAINSTAY INTERNATIONAL BOND B	3.33	BERNSTEIN SHORT DURATION CA. MUNICIPAL	0.70
FRANKLIN TEMPLETON HARD CURRENCY A	2.59	AMERICAN CENTURY CA. LTD.-TERM T/F INV.	0.69
ALLIANCE NORTH AMERICAN GOVT. INC. B	2.45	MUNDER TAX-FREE SHORT-INTERM. BOND A	0.67
NORTHERN INTERNATIONAL FIXED-INCOME	2.36	M.S.D.&T. INTERMEDIATE TAX-EXEMPT	0.63
T. ROWE PRICE INTERNATIONAL BOND	2.20	SMITH BARNEY INTERM. MATURITY CA. A	0.59
AVERAGE OF 1303 FUNDS	-0.04	AVERAGE OF 1426 FUNDS	-1.26

*Appreciation plus reinvestment of dividends and capital gains before taxes, July 1 through Sept. 27, 1999

DATA: MORNINGSTAR, INC.

on the world's second-most-populous nation. "Restructuring is bearing fruit," says Zaheer Sitabkhan, the fund's portfolio manager. "On small increases in revenues, these companies are producing big increases in profits." What's also positive is an equity-friendly climate: Capital-gains taxes have been halved, and dividends are now tax-free. There is political risk, though. Tensions with Pakistan over nuclear weapons and fighting in Kashmir, plus Oct. 6 elections, could change the investment picture.

HEALTHY BIOTECHS. Although U.S. funds were hard-pressed to keep up with global recovery plays, they did have their bright spots. Nevis Fund, a mid-cap growth fund that came out of obscurity earlier this year with a concentrated portfolio of technology, telecom, and health-care stocks, continued to sparkle with a 20.85% third-quarter gain that brings the year-to-date return to 153.6%. And funds legend Garrett R. Van Wagoner has kept his comeback on track. Van Wagoner Emerging Growth Fund gained 19.22% in this difficult quarter, bringing its year-to-date performance to 145.1%. Van Wagoner Micro-Cap gained another 18.95%, lifting its 1999 return to 111.1%.

Biotech funds stood out as well. "More companies are making money,

fueling stellar performance at more diversified small-cap funds, such as Strong Enterprise, up 19.41% for the quarter and Northstar Special B, up 18.3%. "Health-care services are problematic, and big drug companies' growth is slowing," says Mary Lisanti, portfolio manager of Northstar Special. "That makes biotech the only game if a portfolio man-

The Fund Averages

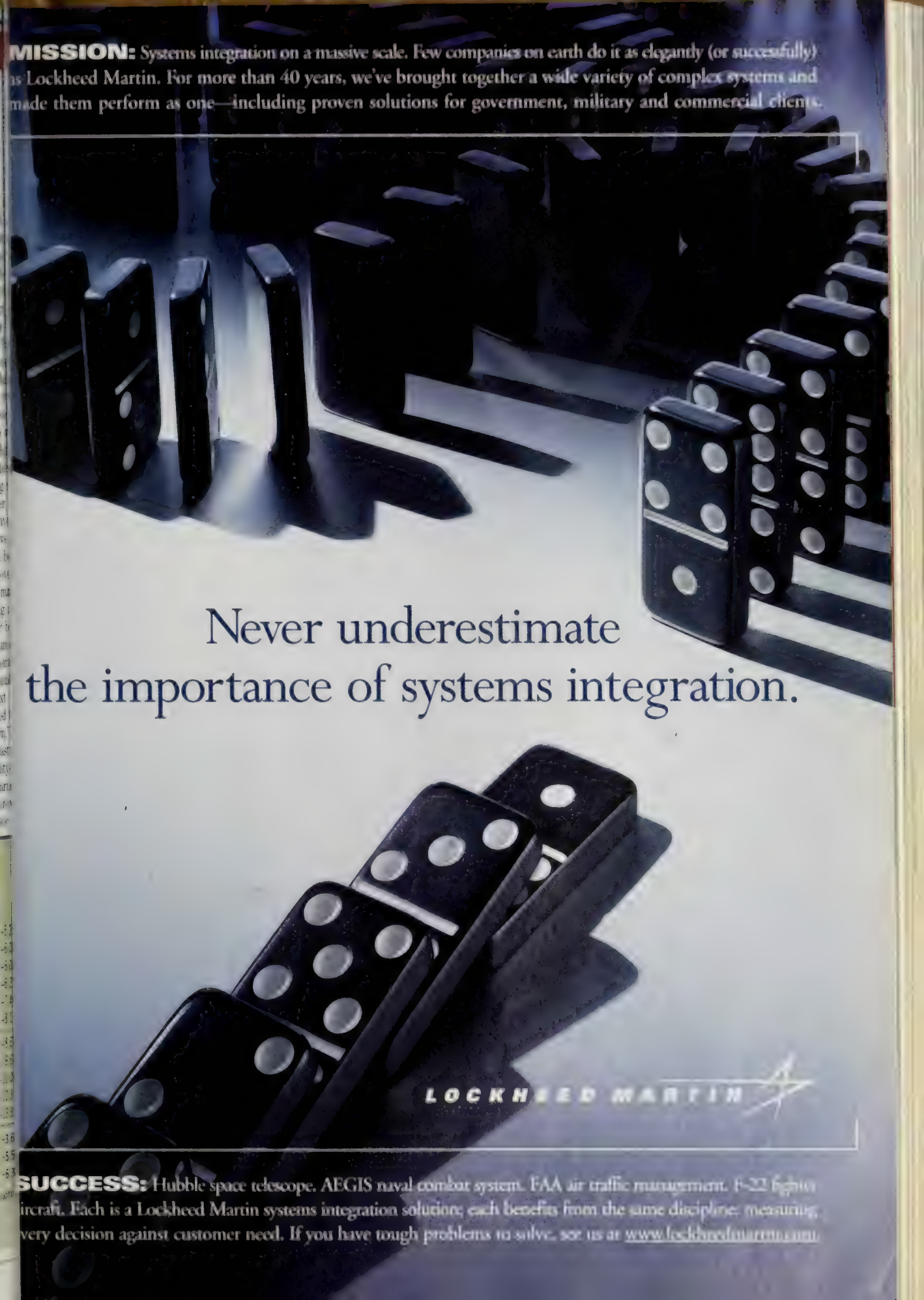
All but seven categories beat the S&P 500

PRECIOUS METALS	19.93%	SMALL-CAP BLEND	-5.1
JAPAN	17.16	DIVERSIFIED EMERGING MARKETS	-6.1
TECHNOLOGY	7.85	PACIFIC/ASIA EX-JAPAN	-6.1
DIVERSIFIED PACIFIC/ASIA	5.62	LARGE-CAP BLEND	-6.1
FOREIGN	2.80	SMALL-CAP VALUE	-7.1
NATURAL RESOURCES	1.94	MID-CAP BLEND	-8.1
INTERNATIONAL HYBRID	0.67	LATIN AMERICA	-8.1
EUROPE	0.33	LARGE-CAP VALUE	-9.1
SMALL-CAP GROWTH	-0.23	MID-CAP VALUE	-10.1
WORLD	-1.33	REAL ESTATE	-10.1
MID-CAP GROWTH	-1.58	FINANCIAL	-13.1
COMMUNICATIONS	-1.64	ALL EQUITY FUNDS	-3.1
HEALTH	-2.02	U.S. DIVERSIFIED EQUITY	-5.1
LARGE-CAP GROWTH	-3.46	S&P 500 INDEX	-6.1
DOMESTIC HYBRID	-3.98		
UTILITIES	-4.12		

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COMMENTARY

By Susan B. Garland

CAN A TOUGH-GUY LAW DECK BIG TOBACCO?

For years, Big Tobacco has won over juries in negligence lawsuits with a compelling argument: The smoker should have known better. But the federal government's unprecedented lawsuit against the industry could change that. By using a law designed to fight mobsters, the government is trying to make it as hard for the industry to fault the smoker as it was for the Mafia to blame its victims for wearing cement boots.

Many legal observers scoffed when the Justice Dept. filed its Sept. 22 suit. The case relies heavily on the 1970 Racketeer-Influenced & Corrupt Organizations Act, which Congress created to go after mobsters. But the much-maligned statute may be the government's most effective weapon. Many private personal-injury suits in the past have failed to find the industry was liable for the plaintiff's tobacco-related illness because they argued that smokers made a deliberate, informed decision to light up. But under the civil section of RICO, the spotlight will shift away from smokers' conduct to the industry's own behavior.

Placing tobacco executives in the same category as the Mafia wins the government some public-relations points, too. But more important, the law is so broad that the government has a real shot at victory. Indeed, the statute has become a staple in private commercial litigation, where all sorts of businesses are accused of engaging in a pattern of fraud or price-fixing. In 1994, the U.S. Supreme Court expanded RICO's already broad scope by upholding a claim by health-care clinics that anti-abortion groups were part of an illegal conspiracy to shut them down.

To prevail, the government must prove that tobacco companies were involved in an ongoing pattern of illegal activity. Justice charges that the industry created its illegal enterprise on Dec. 15, 1953, at a meeting of five tobacco company CEOs in New York. The government alleges that they

agreed to work on a "concerted public relations campaign" to deny public studies showing links between smoking and disease. They also allegedly conspired to suppress internal research on health hazards and addiction, Justice says.

Soon after, the companies formed two trade groups that, while purporting to be independent, conspired to execute the industry's plan to mislead the public, the government claims. Justice accuses the companies of 11 "racketeering acts" of mail and wire fraud, such as sending out advertisements and press releases that the companies knew to be false.

KIDS' STUFF. Florida and Texas have used RICO in Medicaid fraud cases against the health-care industry, though the cases were settled before the RICO charges were tested in the courts. G. Robert Blakey, a Notre Dame Law School professor who wrote the federal RICO statute as a Senate aide, helped both states and encouraged Justice to use RICO to pursue the tobacco industry as well. "There are no defenses here," he says. "This is not a difficult mail and wire-fraud case to prove, given the documents we have now." Particularly powerful, says Blakey, would be any evidence that the industry had aimed its marketing at children.

That's not how tobacco industry lawyers see it. "This effort by Justice stretches RICO beyond recognition," says Philip Morris Companies Associate General Counsel Gregory G. Little. Indeed, federal courts recently dismissed RICO charges brought against the tobacco industry by unions over health plans, which were trying to recover the costs of treating tobacco-related illnesses of their members. The courts ruled that the unions could not



JUSTICE'S ARSENAL

In its civil suit against the tobacco industry, the Justice Dept. relies on three laws.

DATA: BUSINESS WEEK

MEDICAL CARE RECOVERY ACT OF 1962

Allows the government to recover costs of treating injuries caused by third party. Originally enacted to pay costs of defense personnel in military hospitals.

MEDICARE SECONDARY PAYER

Bans Medicare from paying for health care if beneficiary is covered by third party, and authorizes the government to recover Medicare payments from a third party.

RACKETEER-INFLUENCED & CORRUPT ORGANIZATIONS ACT

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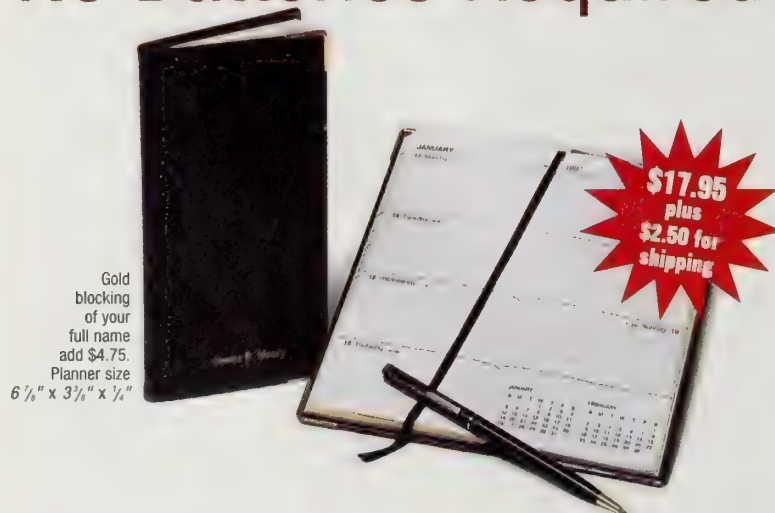
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seek triple damages, which are usually allowed under RICO, because they were not directly injured by the industry.

Federal prosecutors are hoping to avoid that trap by forgoing triple damages. Instead, they will seek disgorgement of profits and changes in industry practices. But Little says that for the government to cover ill-gotten gains, it would have to show "how specific profits were generated by specific wrongful conduct," which he says is a virtually impossible task. And while Justice

Tobacco lawyers say the U.S. is stretching RICO beyond recognition

also is requesting the court to order the industry to stop deceptive advertising and other misleading marketing practices, Little says the companies already have agreed to many of Justice's proposed remedies in their \$246 billion settlement of state Medicaid suits.

No doubt, the government's case must leap some high hurdles. Considering that the government ordered warning labels on cigarette packs as far back as the mid-1960s, Justice may have a difficult time proving it was defrauded. Tobacco lawyers will charge that political considerations are driving the case. And they'll further attack the federal government for being hypocritical. If Big Tobacco is the equivalent of La Cosa Nostra, they'll assert, government officials and Congress were co-conspirators, raising in billions in excise taxes, subsidizing overseas marketing, and accepting campaign donations from the industry.

Hypocrisy won't make or break the case, though. In the end, prosecutors could surprise everyone if they prove that tobacco executives while perhaps not in the same league as the Godfather, were racketeers nonetheless.

Garland writes about legal affairs from Washington.

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DESIGNERS CLIMB ONTO THE VIRTUAL CATWALK

The Web makes high-end fashion as accessible to shoppers in Peoria as it is to those in Paris



At first, Yves Saint Laurent didn't want anything to do with the Internet. The French designer feared that putting his extravagantly detailed, hand-sewn collections online would degrade his elite image and permit counterfeiters to spy on next year's styles. But now, Saint Laurent realizes there's more opportunity than danger on the Web. As with his decision to make off-the-rack clothes in the 1960s, the Net will let him reach far more people. "I was the first French designer to open a *prêt-à-porter* boutique," he says. "The Internet allows me to make my creations accessible to everyone." He has launched his own site, begun broadcasting his couture shows live on the

"Fashion is still immature on the Web, so we have a chance to create the premier brand"

BOO.COM'S MALMSTEN AND LEANDER

Web, and is considering selling accessories online.

Oh-so fashionably late fashion designers are finally embracing the Web, and the relationship could end up revolutionizing both the clothing business and e-commerce. Until now, most retailing on the Net has been about slash-

ing overhead to offer lots of frills products at cut-rate prices. Not anymore: New, mostly European companies are out to prove that cybershoppers are willing to buy haute couture the way they are to buy hot CDs.

The trick for fashion e-shops is to push the boundaries of online technology and service they can duplicate—and in some cases, improve—the experience of buying clothes in a hip boutique. "Books and CDs were the first generation of e-commerce," says Ernst Malmsten, CEO and co-founder of London-based boo.com Ltd., a sports-fashion site expected to be launched later this fall. "This is the second generation, with many more textures and colors."

KNOW THYSELF. That's why online clothes shopping may be on the verge of exploding. Net sales of clothing and accessories in the U.S. are projected to soar to \$2.8 billion by 2002, from \$1.1 billion last year, according to market researcher Jupiter Communications. Although much of this will be inexpensive sportswear, Netizens also are increasingly willing to buy pricey clothing. Why? Because it's so easy to shop online. "We didn't think people would buy expensive shoes without trying them first," says Markus Larssen, co-founder of dressmart.com, a Swedish clothing Web site. "We've sold a lot of shoes to people who already knew the brand and their size."

Early results from online fashion sites are indeed promising. Since launching in Stockholm on April 1, dressmart has racked up \$6 million in sales, four times more than expected. Purchases average around \$350, about 10 times more than the average online purchase of books or CDs. New York-based Girlshop.com has shipped \$2 million

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lion worth of avant-garde merchandise and made \$250,000 in operating profit since it opened a year ago. That's good enough that the 10-person company recently opened a similar site for men, Guyshop.com.

Such potential is attracting big money. Investors launched dressmart with \$2 million last spring and have approved a new \$7 million injection. J.P. Morgan & Co. raised some \$100 million for two 28-year-old Swedish entrepreneurs, one a former Elite model and the other a literary critic, to launch boo.com. Backers include the Benetton family and Bernard Arnault, whose French company LVMH Moët Hennessy Louis Vuitton owns Louis Vuitton and Christian Dior. "Fashion still is immature on the Web, so we have a chance to create the premier brand name," says CEO Malmsten.

CATALOGUE CROSSOVER. Not surprisingly, mail-order shops were the first fashion prospectors on the Web. "It's easy to sell clothes online to customers who already buy from catalogues, since electronic commerce is simply an automated version of mail order," says Copenhagen-based analyst Mikhail Arnbjerg of market researcher International Data Corp. U.S. direct-mail marketer Lands' End quadrupled its Net sales last year, to \$61 million. In Europe, France's Trois Suisses and Germany's Quelle, both cataloguers, have been e-business pioneers.

Upstart e-clothing sites want to go beyond imitating existing services on the Web. They plan to use technology that projects hip images, catwalk coverage, and chic designs. "All the other sites are mass-market and mall-oriented," says Laura Eisman, the 33-year-old founder of Girlshop.com. Her cybershop offers funky upscale clothes, such as \$130 Ankh cotton Lycra capris and a \$600 Spooner coat. Boo.com plans to sell \$120 Tsubo shoes and \$900 Helly Hanson ski jackets.

To make online shopping as much fun as the real thing, fashion sites are putting pizzazz into their Web-site designs. Perky cartoon character Miss Boo will greet visitors to boo.com by throwing back her hair, batting her



Saint Laurent, Christian LaCroix, and Jean-Paul Gaultier are on the Net

AN YVES SAINT LAURENT RUNWAY SHOW

eyelashes, and offering style tips. The sites for French designers Christian Lacroix and Jean-Paul Gaultier let visitors take a front-row seat at Paris fashion shows.

But pretty Web pages don't tell the whole story. Selling fashion online also is about using cutting-edge technology. The Lands' End site offers a personalized 3-D mannequin service. Online shoppers type in height, weight, bust, and waist size, skin color, and other personal details, and seconds later their own image pops back ready to try on clothes. At both Lands' End and boo.com, shoppers can drag and drop clothes on a virtual mannequin to mix and match outfits. And boo.com plans to show all its products in three-dimensional pictures that can be rotated for a closer look—right down to the stitching on a sweater or sneaker.

The possibilities are almost limitless. Shoppers should soon be able to download a graphic of the exact dimensions of a shoe so they can print it out and place their foot on the drawing to see if the shoe fits. "It will become much easier to buy shoes online than through a catalogue or in person," predicts Russ Lucas, European marketing director for New Balance sneakers. Eventually, boo.com plans to use online mannequins that will incorporate photos of shoppers onto cyberbodies and even mimic cybershoppers' speech patterns.

As much as newfangled computer techniques, e-fashion entrepreneurs counting on a new level of cybersex to attract big-spending customers. Dressmart offers free next-day shipping with orders of more than \$70 and dry cleaning. "We're competing on vice, not price," says co-founder Lar. Boo.com's prices will include customs fees, free shipping and guaranteed delivery within four days. Shoppers earn Boo Points, similar to airline miles. Returns will be accepted at no charge and return shipping labels will be included with each package.

LONG SHOT. It's unlikely that the will ever reach the uppermost heights of fashion. Many in the industry believe that handmade couture dresses costing an average of \$20,000 won't be sold the Web anytime soon. "You have to come to Paris to be fitted, and the

robe must be made on several times," says Laurent Ch. Saint Laurent's multimedia director will take a long time before a computer can duplicate this." Saint Laurent plans to offer only off-the-rack designer clothing, accessories, and along with perfume.

Yet even the exclusive fashion brands ignore the Web at their peril. The Net allows more of the clothes featured in *Vogue* and *Elle* to be broadly distributed for the first time. One company does take advantage of that, a competitor will. France's fashion gurus didn't dread the Internet. But arrival means folks in Peoria can soon enjoy as much access to the hottest styles as Paris as city shoppers.

By William E. son in Brussels

HIGH FASHION MEETS HIGH TECH

THE NET DOESN'T MEAN CHEAP

Instead of selling only no-frills clothing at discount, Web sites such as boo.com, dressmart.com, and sephora.com sell high-priced fashion items such as \$135 diamond Toesie toe rings.

TRY BEFORE YOU BUY

Boo.com features three-dimensional pictures of clothes and accessories that can be rotated for a closer look. Buyers can drag and drop clothes onto a virtual mannequin.

VIRTUAL CATWALKS

After initially fearing counterfeiters, some Paris fashion houses, including Yves Saint Laurent and Jean-Paul Gaultier, have received up to a million hits a day by broadcasting their runway shows live on the Internet.

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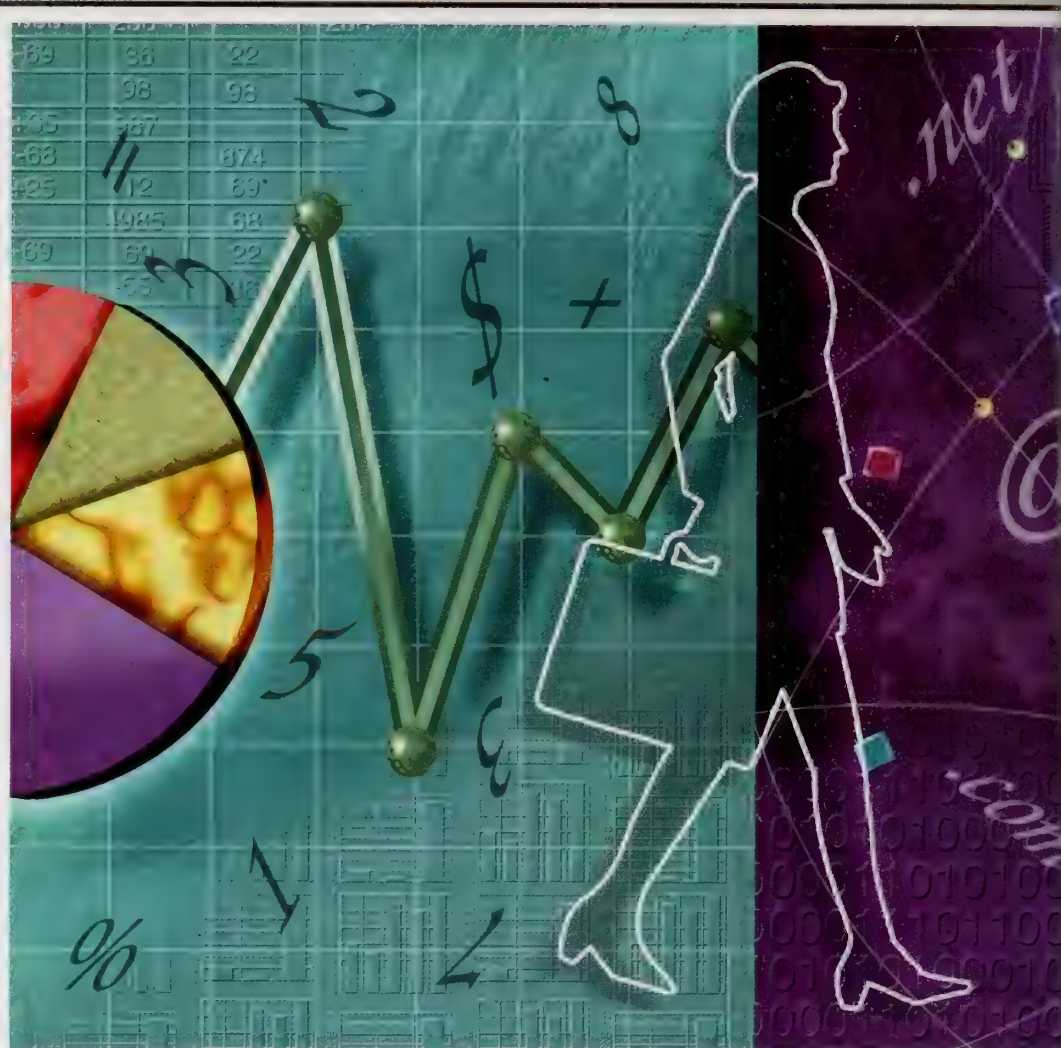
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Should You Take the Plunge?

The time may be right to consider a job in high tech

BY ROY FURCHGOTT

Tom Butta had the kind of career managers strive for. After climbing the ranks at such established advertising agencies as Young & Rubicam and handling such clients as Frito-Lay and Johnson & Johnson, he became chief executive of his own firm, FGI, in 1995. The Chapel Hill (N.C.) firm grew to \$100 million in billings this year.

Then, last July, Butta, 44, sold out to his partners, left his CEO title behind, and without ever having written a line of computer code, became the marketing chief of Red Hat, a Durham (N.C.) technology startup that distributes and

provides tech support for the Linux computer operating system. Did the ad world prepare Butta for the hurly-burly of a tech startup? "The risks [of making a switch] are not as great as you might think," he says.

Are you considering a career switch into high tech? Given technology's role in the vibrant U.S. economy, no one would fault you if you were. But one thing, changing careers in midlife no longer bears the stigma it once did, thanks to the corporate upheavals early this decade. Downsizing has put plenty of talented people on the street through no fault of their own. And having seen a growing number of high-profile outsiders sig-

ceed, many companies are more open to what transplants can contribute. Outsiders "are thought to bring a new approach to things," says Karen Russo, president of K. Russo Associates, a Greenwich (Conn.) executive placement firm. Managers, too, have developed a free-agent mentality. Moreover, by their 40s, managers "have 15 or 20 years in the business world and instead of coasting on it, they want to do something new," says Cara Erickson, head of interactive media recruiting for Bishop Partners, a New York headhunter.

BEYOND TECH. Nowhere is career-switching more acceptable than in the technology field, where the need for talented, experienced executives is most acute. David Kixmiller, a managing partner in the Menlo Park (Calif.) office of the search firm Heidrick & Struggles International, says hiring for e-commerce is his fastest-growing business. Money, of course, is a major attraction. When Butta joined Red Hat, he bought

its initial public offering at 14. The stock is hovering around 100.

Despite the tech-job gold rush, many managers think they can't make the jump because they don't know HTML from a hole in the ground. "There is more to dot.coms than technology. Management is the most seriously lacking skill in technology companies," says John Putzier, head of the tech group at the Society of Human Resource Managers. So if you're looking to make a jump to a Net company, make a list of your skills. Do you have a strong background in sales and marketing? Have you honed your skills in your company's finance and accounting departments? Dot.com companies may need you. "Everything is relevant," says

Kawasaki, a founder of Garage.com, which consults with early-stage startups in need of venture capital. "I can't think of a single business transition that isn't going to turn digital."

Jeff Taylor, founder and CEO of Monster.com, an Internet job search service, regularly goes outside the Internet world for his hires. "I think my whole marketing team comes from traditional business. I have a 170 sales people, almost none had dot.com experience but most all had sales experience," he says. Even door-to-door salesperson has dot.com potential, according to Kawasaki. Web sites are beginning to offer live, online, one-on-one sales help

(such as 1-800-flowers.com, where a click on "EQ&A" brings human assistance). "Well, the door-to-door salesman has one-on-one experience," which could be useful to the designer of such a site, he says.

The easiest way to make the switch at any level of experience, headhunters say, is to find a company that does online what you do off line. Drugstore.com got its CEO, Peter Neupert, 43, from Microsoft, says Kixmiller, managing partner, "but they might just as well have gotten someone from a drugstore chain."

Another way to develop Internet savvy is to go the consulting route. "I see people who will go out and consult to get the experience to make the transition to dot.coms," says Erickson, who took that very route into technology headhunting. Consultants can look for small companies that have a Net component—a great many

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MONSTER.COM www.monster.com	Another megasite where you can post your résumé and search for positions and consulting work

do—and offer business perspective while learning from the client's operation as well.

Venture-capital firms do executive recruiting for the startups that they fund. Garage.com, for instance, maintains an online job search board for its clients. But getting a VC firm's attention directly is difficult. Although VC firms that provide very early-stage funding—such as Garage.com—may accept a direct approach, most find potential executives through the hundreds of deals they evaluate each year. They may not want to finance a particular venture, but they might like the CFO and try to hire him or her away from another team.

Joining a dot.com company will take some getting used to, particularly if you're coming from a hierarchical, old-line company. "It's not just a casual dress code, it's the way people interact, with open doors and open areas," says Kixmiller. He tells managers with Net company potential to call others who have made the jump to get the real low-down on the trials of the culture. And he encourages them to stay in touch, as sort of a support group. In the meantime, fewer hurdles than you think stand in the way of a bricks-to-clicks transition. Certainly not demand. And certainly, in this young industry, not experience. Says Kawasaki: "If you work for a company with any kind of brand name for two years—you're a veteran, baby! You're proven!"

Careers



PHYSICS OF MOTION

Teacher Gainley used to make money; now, he's "making a difference"

are baby boomers, mostly coming from law and finance, who decide they have enough money and want to do something that's more meaningful," says Arthur Levine, president of Teachers College, Columbia University in New York. Further fueling the trend is the national political debate over education, fears of an impending teacher shortage—enrollments in higher grades are rising, as nearly half of current teachers reach retirement. And while teaching involves hard work, long hours, and low pay, so-called alternative routes to certification make it easier for career switchers to get certified. A growing array of resources, such as financial aid, are now available.

LIFE EXPERIENCE. Until recently, there were just two ways to get certified as a primary- or secondary-school teacher. Either you had an undergraduate education major or you got an emergency license from a school district desperate for teachers. A rise in emergency certifications led universities and colleges to offer more accelerated graduate programs that put potential teachers

into the classroom in just 12 to 24 months. Some school districts may waive requirements for career-switchers depending on how they do on tests and their work and life experience. Some smooth the way with mentoring programs and financial subsidies.

Money—or lack of it—is a top consideration for anyone switching to teaching. Although salaries have been edging up, you may take a substantial cut in pay. The average teacher's salary is currently \$38,000. You'll also have to consider how to manage your retraining. You may need to keep working and study part-time, or take savings or get a student loan to finance education (\$23,000 for tuition at Teachers College, for example). Some alternative programs offer help. "The toughest thing is the financial barrier for career changers to support themselves through 13 months with no income," says Shotel, chairman of George Washington University's Teacher Preparation & Special Education Dept. (202 994-6170; www.gwu.edu). "Al-

Go to the Head of the Class

Here's how to answer a midlife call to the chalkboard

BY PAMELA BLACK

For 12 years, Glenn Gainley worked his way up at Milpitas, Calif., chipmaker Symbios Inc., now called LSI Logic, to become vice-president in charge of business units. "I made a lot of money," he says. "But I felt strongly that I wasn't being the kind of husband or father I wanted to be." Wanting to help kids and invest more in his community, the 40-year-old father of three set aside enough for retirement and his kids' college education, went back to school himself, and emerged with a new career—as a teacher.

Now in his second year as a \$25,600-a-year teacher of high-school chemistry and physics in his hometown of Fort Collins, Colo., Gainley occasionally misses the large paychecks—but not the job. "I have never been happier," he says. "Before I was making money, now I'm making a difference."

If you harbor a wish to shape young minds, you could be one of a growing cadre of people switching to teaching. "A lot of career-changers

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In GW's Transition to Teaching Project, students are paid to be permanent substitute teachers in Fairfax County, Va., high schools during their 13-month training. In another program, intern teachers in Montgomery County, Md., schools get a reduced salary. A third GW program offers returning Peace Corps volunteers free tuition and a monthly stipend.

Most programs include coursework in teaching methodology, mastery of the subject matter, and some form of classroom internship. Training is oriented to teamwork and incorporating into lesson plans the different ways kids learn. Says Linda Myers, a 15-year veteran of the Bureau of Land Management who became a high-school teacher in Fort Collins: "We don't get up in front of the class and entertain the kids. We involve them in creative projects, like building a pyramid or making a video."

Alternative programs tend to get you into the classroom faster and with more responsibility right off the bat. Some, such as Project Promise at Colorado State University (970 491-6909; www.colostate.edu), have students teach in four

Schooling for Career Switchers

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615 332-8410, www.vanderbilt.edu

Internship program

kinds of schools, from rural to urban, elementary to high school. The Los Angeles Unified District (213 625-6000, www.lausd.k12.ca.us) hires its own teachers—and pays them a salary boot—in a program geared to urban multicultural education. "Our own program...is competitive with any university program," says McKibben, California state project officer for alternate certification.

Despite growing demand, teaching jobs are not universally available. The greatest need is in rapidly growing states, such as Texas, California and Florida, and nationally in urban and inner-city districts, says Segun Eubanks, a spokesman for the National Education Assn. Subjects in high demand are math, science, special education, English as a second language. As growing migrant populations make schools more diverse, minority teachers are also in demand.

If you think you want to be a teacher, the first step is to get a sense of how much effort and work it takes by volunteering as a class aide, tutor, or team coach. Career-switchers inevitably say they work as hard, if not harder, in the classroom than in the office. "It's a fact that teachers work part-time," says Gainley, who ran the best part of a billion-dollar company before and I work just as hard now." Next, find out what the certification requirements are in the district where you want to teach. These vary by state, so call your state department of education or go directly to the school district office. Teachers college admissions offices and teachers unions will also help you sort through the certification maze. "Take the [state Department of Education] tests to get an idea of where you stand and how much work you have to do," says California's McKibben.

If you need to go back to school, it's not hard to find research training programs (table). *Recruiting New Teachers*, in Belmont, Mass., publishes a manual, *Take this Job and Love It! Making the Mid-Career Move to Teaching*, that lists programs and what they offer. Of course, "I also really want to work with children," says acting Chief Mildred Hudson. Those who made the switch say they revel in their ability to affect students' lives and the future.

For more on teaching careers, go to www.businessweek.com or America Online, keyword:

Teachers' Tools

NATIONAL CENTER FOR EDUCATION INFORMATION

Publishes *Alternative Teacher Certification: A State by State Analysis*; www.ncei.com

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NATIONAL EDUCATION ASSN. Country's largest teacher union; 202 833-4000; www.nea.org

RECRUITING NEW TEACHERS Nonprofit organization; 800 45-TEACH; www.rnt.org

TROOPS TO TEACHERS PROGRAM Referral assistance and placement services to service members and civilian employees of Defense Dept.; 800 743-2357; www.troops.org

Which Number Is the Real McCoy?

Hard to peg earnings when companies calculate the bottom line in different ways

INE TERGESEN

When Amazon.com reported its second-quarter loss on July 21, you might have heard any one of the following numbers: 86¢, 51¢, or 42¢ a share. Officially, the online retailer recorded a net loss of \$138 million, or 86¢ a share. But Wall Street analysts overlooked that figure in favor of a pro-forma net loss of \$82.8 million, or 51¢ a share. The Seattle merchant also disclosed a third figure—a

pro-forma operating loss of \$67.3 million, or 42¢ a share. Like the other pro-forma result, this number ignored the costs associated with Amazon's recent acquisitions binge.

Confused? You're not alone. As more companies include unorthodox earnings figures in news releases and comments that accompany their official accounting disclosures, even pros admit they're bewildered. "There is no single more important number for an investor than a company's earnings per share. But the fuzziness around what actual earnings are is greater than 5 or 10 years ago," says Edward Keon Jr., director of quantitative research at Prudential Securities.

True, investors can always fall back on the net-income figure sanctioned by the Financial Accounting Standards Board (FASB), which sets accounting rules in the U.S. These official bottom-line numbers are found in the income statements publicly traded companies are required to release once every three months. The problem is that Wall Street analysts generally bypass these figures because many have decided they are not the most accurate barometer of a company's health. The reason? Net income often includes big charges for one-time events, such as mergers and plant closings.

DEEPER INSIGHT. Instead, most professionals rely on operating earnings—or profits minus unusual losses and gains. "The investment community always wants to look forward to what's coming down the road," says Charles Hill, research director at Thomson Financial's First Call, which polls analysts and publishes a consensus estimate of earnings. "Taking out unusual items makes sense because it gets you to the underlying earnings capability of a company."

But because there is no standard definition of operating earnings, First Call has found that even analysts covering the same company deliver earnings estimates that are not comparable. The problem has gotten worse as companies and analysts have become more creative about what they include and exclude from their calculations. "They are pushing the envelope more," Hill adds.

For example, Amazon, like many companies, is highlighting cash earnings, which ignore the bottom-line impact of noncash charges, including those related to mergers. According to J.P. Morgan managing director Frederic Escherich, 64 companies announced some variation of cash earnings from June to August, up from 31 in the same period of 1998.

Amazon's second-quarter earnings release pro-





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MOTOROLA EMBEDDED SOLUTIONS

vides deeper insight into its treatment of cash earnings. The Internet retailer ignored the cost of stock-based compensation picked up in mergers. Most analysts who follow the company have adopted the same practice, which is also prevalent among those covering eToys, TheStreet.com, and uBid, among other Internet and high-tech companies, First Call says.

OUT OF STEP. This version of Amazon's earnings also disregards goodwill, one of the biggest costs associated with mergers. Goodwill is the difference between the price Amazon paid for its acquisitions and the value accountants assign those companies by subtracting their liabilities from their assets. FASB rules require Amazon to regularly deduct from its earnings a portion of the goodwill sitting on its balance sheet. This will depress the official bottom line for up to 40 years.

Besides the obvious desire to make earnings look better, the justification for ignoring goodwill is that—like many other accounting rules—it was created with traditional industries such as manufacturing in mind. Therefore, critics argue, it is out of step with companies at the forefront of the New Economy. To see why, compare Amazon.com with General Motors. Among the carmaker's most valuable assets are the factories and other physical properties listed on its balance sheet. But a high-tech company's best assets are usually intangible, such as a creative workforce and a strong brand name. These do not appear on a balance sheet. For this reason, when New Economy companies buy other outfits, they generally pay steeper premiums over their targets' accounting values than old-line companies do, inflating goodwill. In addition, New Economy companies usually deduct goodwill over much shorter time frames, causing such big hits to net income that many analysts disregard it entirely.

Pioneered by Internet companies, the practice of overlooking goodwill has become widespread. Now, FASB has "sprinkled holy water" on it, Hill says. Specifically, the rulemaking body has floated a proposal that would allow companies to disclose two income figures—a new one that ignores goodwill and the traditional one, which does not. FASB's goal is to "provide a standardized measure of performance for those who would like to discount goodwill," says FASB research director Timothy Lucas.

Ways To Say Earnings

NET INCOME

The officially sanctioned measure of corporate earnings; found in official corporate income statements

OPERATING EARNINGS

Net income minus unusual items, such as merger costs or plant closings; included in analysts' reports and estimates

CASH EARNINGS

Net income ignoring amortization of goodwill from mergers; found in some corporate press releases; may become standard in official income statements

BASIC EARNINGS PER SHARE

Net income divided by number of shares of common stock outstanding

DILUTED EARNINGS PER SHARE

Net income divided by number of shares of common stock and other instruments, including options and convertibles shares

But some fear the new method, if adopted, could heighten confusion, creating the impression of FASB sanctions alternative approaches. "It will be a misstep towards creating kinds of nonstandard measures," says Jack Ciesla, publisher of *The Accounting Observer* (www.aaopub.com).

To bring some uniformity to operating earnings, Standard & Poor's is developing guidelines for the companies in the S&P 500 index. S&P, which has been a part of *BUSINESS WEEK*, is a part of The McGraw-Hill Companies, has long served as an unofficial arbiter of the correct net income for the index's 500 companies. Plans to circulate a preliminary report to Wall Street firms early next year, says Branscome, who oversees index operations.

Whether or not analysts accept whatever benchmark turns out, many applaud the effort to set of standards, which is better than where

headed now, which is that the rules are whatever the companies want them to be, says Prudential's Keon.

ASK THE EXPERTS. In the meantime, when investors turn if they have concerns about net income and management's carefully managed earnings figures? Those with accounting grounds may be able to pick through the numbers themselves. But even experts can be fooled by companies that choose to lump together a series of charges—as Amazon has done with several acquisitions and investment-related costs.

If you wouldn't know an inventory write-down from an in-process research-and-development charge, you can fall back on the earnings estimates published by services such as First Call and I/B/E/S. These firms do not mandate a standard method. Instead, they defer to the earnings recipe favored by a majority of analysts covering each company. When compiling consensus

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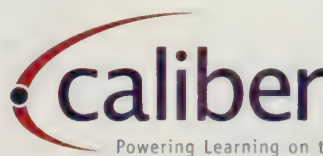
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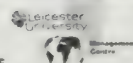


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ures, they require dissenters to conform.

Research shows it can be useful to compare the services' estimates. In a recent study, Prudential Securities identified 325 discrepancies between the First Call and I/B/E/S estimates of the S&P 500 companies' earnings over the past five years. Subsequently, those stocks lagged the index, although they rebounded this year.

So, should you avoid companies whose earnings are in dispute? Not necessarily, says Keon, the

study's author. Sure, discrepancies "could mean some fiddling of the books is going on," he says. "But they could also mean the market doesn't understand the company, and when it does the stock will rebound sharply." In other words, orthodox accounting doesn't necessarily mean that someone is trying to pull the wool over your eyes. But to protect yourself, make sure you don't take any earnings figure—converted or not—at face value.

FOOD DEALS MAY LEAVE YOU HUNGRY



BY AMY BARRETT

For investors in food stocks, news that Bestfoods and H.J. Heinz were talking merger may have seemed like the answer to their prayers. Weak growth has made many food stocks dismal performers, with the Standard & Poor's food index down 17% this year, vs. a gain of 4% for the S&P 500. Although the Bestfoods-Heinz merger discussions collapsed, observers still expect consolidation among industry giants, with the best matches involving U.S.-focused companies, such as Heinz and Campbell

ings growth rates back then were 10% and 12%, respectively. And acquirers had plenty of cash to throw around, as many deals were debt-financed buyouts. David Jacobs, managing director at Morgan Stanley Dean Witter, says such deals give shareholders of acquired companies more up front than in all-stock mergers because they don't share future earnings growth.

Today, with inflation quiescent, foodmakers have little room to raise prices as they did a decade ago. They're also being squeezed by retailers. So it's hardly surprising that companies like Heinz, which announced on Sept. 10 that it would buy a 19.5% stake in Hain Food Group, an organic products maker, are pushing into faster-growing markets.

Albert expects companies in the S&P food index to show annual revenue and earnings growth over the next five years of just 2% to 6%, respectively. Yet these stocks are hardly cheap, fetching an average of 21 times estimated 1999 earnings. And many food companies that could link up are about the same size. That means mergers of equals with little or no premiums paid to shareholders of either company.

Soup, and players with international reach, such as Bestfoods, Nestlé, or Unilever.

But don't dive into food stocks expecting to get rich quickly. The industry remains a slow-growth one, and any mergers are unlikely to involve the high prices seen in other industries' consolidation waves. "I wouldn't be investing in food stocks just on the consolidation thesis," says T. Rowe Price analyst Art Cecil. "You can't count on a sugar daddy coming along to pay a big premium."

That would be a big switch from the go-go 1980s, when companies like R.J. Reynolds Tobacco, Philip Morris, and Nestlé were snapping up food companies. But Sanford C. Bernstein analyst Craig Albert points out that the industry's annual sales and earn-

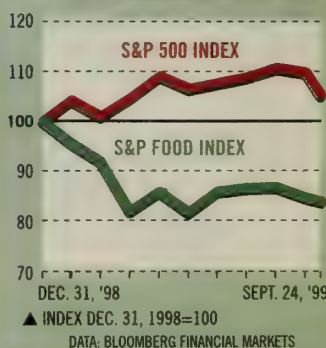
Commentary

Eventually, mergers in the food industry should benefit investors—but the key is when it's eventually. Most food companies already run lean operations, the result of previous restructurings, so the real payoff is likely to come through higher revenue growth.

Marriages between domestic and global food-industry players could trigger a pickup in sales growth as foreign companies gain access to U.S. supermarket shelves and American-focused ones increase sales abroad. That should eventually drive decent gains in food stocks. But you'll have to be patient to see that come about.

Philadelphia bureau chief Amy Barrett covers food and pharmaceutical producers.

Food Stocks On A Diet



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BY ROBERT BARKER

Teetering atop the tower of books on my desk are two I bet you're hearing a lot about right now, *Dow 36,000* and, as if that weren't enough, *Dow 40,000*. Each is every bit as confident in its view of the future as another recent title deeper in the pile, *Riding the Bear: How to Prosper in the Coming Bear Market*.

Which market forecast is right? I don't know. But you'll probably help yourself more by focusing on this fact of human nature and investing: Most of us are overconfident about our abilities—and our overconfidence hurts our portfolios.

This dismaying reality is laid out in two other books coming out this season amid a lot less racket: *Smart Money Decisions*, by Northwestern University B-school professor Max H. Bazerman (John Wiley, \$24.95), and Santa Clara University finance professor Hersh Shefrin's *Beyond Greed and Fear* (Harvard Business School, \$39.95). "People obsess about their money," Bazerman says. "They just don't obsess about it all that well."

Although the authors address different audiences—Bazerman individuals, Shefrin their advisers—they are united in their conviction that people routinely make mistakes with their money because they overestimate their abilities.

Next time you decide to buy some shares, turn the decision upside down. Look for reasons not to buy. Force yourself to argue for selling the stock

Overconfidence is a human trait extending beyond investing. For example, when researchers ask people to rate their skill as drivers, 65% to 80% say they're above average. The only group psychologists don't regularly find to be overconfident, Shefrin says, are the clinically depressed.

What does this have to do with your investments? "Confident people tend to be a little bit too bold," Shefrin says. "Investors just trade too much and, as a result, hurt themselves." We credit ourselves with winning picks, he adds, blame others for losers, and go on merrily

believing we're smarter than we are. Sour you? I know it sounds like me, so I went looking for ways to protect me from myself. Here are three lines of defense:

■ **ANTARCTIC VIEW.** Next time my mind looks at a trade I want to make, I'll first try turning the whole decision upside down. Some hedge investors I know actively seek evidence to undercut their theory. If they were hot on Computer, they'd go out and pump corporate buyers for reasons why they didn't like or buy from Dell. They'd even get them to badmouth the company. "If you're buying a stock," Bazerman suggests, "ask yourself why is it that someone else is selling it. Why do you think you know more than the seller? Force yourself to argue why you should sell the stock instead of buying it."

■ **COLD EYE IN THE MIRROR.** Seventeen years into this bull market, the old exercise for investors called "paper trading"—fantasy picking tracked with pencil and paper—seems quaint. Yet it's still the best way to safely compare our self-image against our reality. "Keep a diary," Shefrin says. "Enter predictions of what you make on how the market will move over two or four weeks, one month, three months, a year. Do the same for the total return on your stocks in your portfolio. And for any stock you've decided not to buy, keep track of how you do. It's sobering."

■ **THE TRICK ABOUT TORT.** The best defense against overconfidence may simply be slow—despite Wall Street's wisdom that the market will wind up as roadkill. Two finance professors at the University of California at Davis recently found that investors who switched to trading stocks by computer from the slower telephone method traded more often and more

slowly, with rotten results: With the market, they beat the market by more than two percentage points a year. By computer, they were up trailing the market by more than three. "Trigger-happy traders are prone to shoot themselves in the foot," the professors, Brad Odean and Terrance Odean, concluded.

Dow 36,000, or Dow 6,000? I wish I knew. But knowing what I don't know may prove my smartest move.

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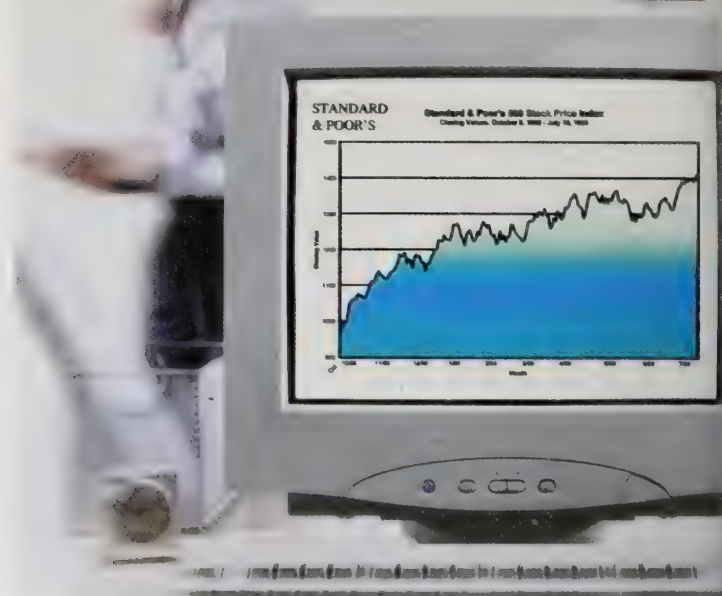
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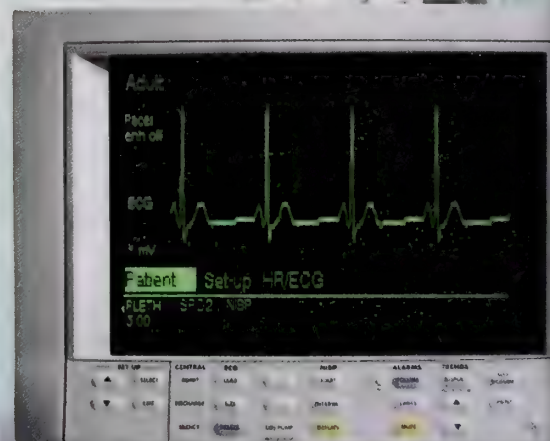
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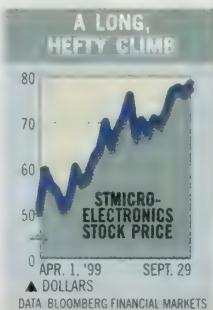
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When STMicroelectronics (STM) was first featured in this column on Jan. 1, 1996, its stock was at split-adjusted 16%. By the time the company (formerly SGS-Thomson) was again highlighted, on Aug. 25, 1997, the stock had streaked to 45. The stock is now trading at more than 78, a hefty advance of some 380% in about three years. And guess what? Some analysts and major investors argue that the stock is headed toward 100.

What's driving this maker of semiconductor circuits and discrete devices? "There aren't many global semiconductor plays around, and STM is poised to benefit from the industry's recovery, which is still in its early stages," says Patricia Hutchinson of Scudder Kemper Investments, which has been accumulating STM shares. Analyst Tom Murtha of Rowe-Price Fleming International, which also has been snapping up STM shares, says that despite the impressive advance, STM is still underappreciated. It sells at a big discount to rival Texas Instruments, which trades at 32 times the estimated 2001 earnings. STM, by contrast, trades at just 23 times Murtha's estimated 2001 earnings of \$3.50 a share. If STM were to reach a price-earnings ratio of 30, the price would be at 105, says Murtha, whose target for the stock in 12 months' time is at least that much. STM is a major supplier of chips for "information appliances," such as wireless phones, TV set-top boxes, and car safety devices.

STM's strong position in communications, digital, and automotive markets should help it gain market share, says Mark Edelstone of Morgan Stanley Dean Witter. This puts STM in a position to be able to raise prices, which could lead to accelerated revenue growth and "positive earnings surprises," he adds. Part of STM's strength, says Edelstone, stems from its strategic links with such big customers as Alcatel, Hewlett-Packard, Nokia, and Nortel Networks.



SALTON MAY BE SET TO REHEAT

For a small-cap company specializing in household appliances, Salton (SFP) has been a huge winner in the stock market. Its stock, which traded at 15 in late April, vaulted to 33 1/8 in late August. It has since scaled back to around 27, but if its fans are right, Salton should heat up again. Analyst Peter Schaeffer of Donaldson, Lufkin & Jenrette thinks



the stock will hit 40 in a year. Money manager Doug Raborn, who heads his own investment firm, Raborn & Co., thinks Salton could go even higher—to 45, based on his 2000 estimated earnings of \$3 a share. "The steady flow of new products at Salton has attracted big customers, including Wal-Mart Stores, Kmart, Sears, and Target," says Raborn.

"Salton is hot, its products are hot, and their pipeline should be able to maintain adequate growth," says Donaldson's Schaeffer, who recently raised his 2001 earnings estimate from \$3.38 a share to \$3.63. Salton earned \$2.37 in the year ended June, 1999. Among Salton's products are George Foreman grills, the Juiceman, and the Breadman. Sales of George Foreman products continue to grow, with no signs of leveling off, says Schaeffer, and Salton's private-label products for Kmart and Sears helped the company post a solid earnings gain of 217% in fiscal 1999, he says.

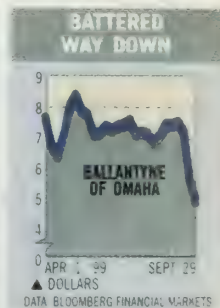
IMAX COULD PUT BALLANTYNE IN FOCUS

If there is a small-cap stock that has been battered severely, it is Big Board-listed Ballantyne of Omaha (BTN), which makes movie projectors and lighting gear used by such theater chains as Loews Cineplex and AMC. Shares of Ballantyne have dived from more than 10 in early January to 5 on Sept. 29. Disappointing third-quarter earnings and a foiled attempt to acquire Britain's Digital Projection International prompted investors to head for the exits.

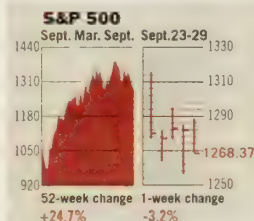
But not everyone did. Some pros think Ballantyne's losing Digital, which ended up being acquired by big-screen theater operator IMAX, will produce good news. Ballantyne and Digital have a pact to cooperate in digital projectors, with Digital supplying technical knowhow and Ballantyne providing manufacturing and distribution capabilities. Michael Legg, an analyst at Prudential Securities, says IMAX may simply decide to acquire Ballantyne to assure that the Ballantyne-Digital joint project stays. "IMAX could attempt to buy Ballantyne outright or acquire the 26% stake in Ballantyne that ARC International owns," argues Legg. Ballantyne was spun out of ARC, a developer of ice-skating facilities, and the two companies still share the same chairman, Arnold Tenney.

Legg thinks that Arc would be inclined to sell its interest. He figures that Ballantyne is worth 13, based on his 2000 earnings estimate of 85¢ a share.

Some investors believe that Tenney has been approached by an investment banker on behalf of IMAX for a deal. Tenney, however, declined to comment.



STOCKS



COMMENTARY

The market lost steam this week primarily due to inflationary fears and currency worries. The Dow posted a 200 point loss on Sept. 23. The S&P 500 slipped 10% below its year-to-date high—a technical correction. Worry that the Fed may raise rates next week, coupled with a weak dollar relative to the yen, sent the market south. Gold rallied during the week, hitting new highs.

Data: Bloomberg Financial Markets

U.S. MARKETS

	Sept. 29	% change Week	% change Year
Dow Jones Industrials	10,213.5	-3.0	26.4
Nasdaq Composite	2730.3	-4.5	57.5
Nasdaq 100	2398.8	-4.6	73.2
S&P MidCap 400	382.2	-3.0	22.1
S&P SmallCap 600	173.9	-1.2	14.2
S&P SuperComposite 1500	266.7	-3.1	20.9

SECTORS

	Sept. 29	% change Week	% change Year
S&P/BARRA Growth	733.9	-4.1	26.7
S&P/BARRA Value	556.6	-2.2	14.3
S&P Basic Materials	122.4	-1.7	7.1
S&P Capital Goods	985.1	-2.4	30.0
S&P Energy	819.3	-1.7	10.4
S&P Financials	121.0	-2.3	8.8
S&P REIT	75.9	-1.7	-16.0
S&P Transportation	590.3	-1.7	-3.7
S&P Utilities	239.4	-2.6	-5.8
GSTL Internet	459.8	5.3	172.9
Morgan Stanley Cyclical	533.7	-3.1	25.1
PSE Technology	629.3	-3.3	91.0

BEST-PERFORMING GROUPS

	Last month %	Last 12 months %
Gold Mining	24.3	Instrumentation 115.9
Defense Electronics	20.9	Semiconductors 107.7
Shoes	11.0	Communications Equip. 98.2
Broadcasting	2.4	Invest. Banking/Bkrge. 75.2
Personal Loans	2.1	Broadcasting 68.5

GLOBAL MARKETS

	Sept. 29	% change Week
S&P Euro Plus	1316.2	-1.6
London (FT-SE 100)	6020.6	1.8
Frankfurt (DAX)	5135.6	-2.0
Tokyo (NIKKEI 225)	17,282.3	-3.6
Hong Kong (Hang Seng)	12,834.9	-4.4
Toronto (TSE 300)	6878.5	-0.1
Mexico City (IPC)	5079.8	1.8

FUNDAMENTALS

	Sept. 28	Week ago
S&P 500 Dividend Yield	1.31 %	1.29 %
S&P 500 P/E Ratio (Trailing 12 mos.)	30.1	31.0
S&P 500 P/E Ratio (Next 12 mos.)*	22.5	22.9
First Call Earnings Revision*	-1.43 %	-1.07 %

*First Call Corp.

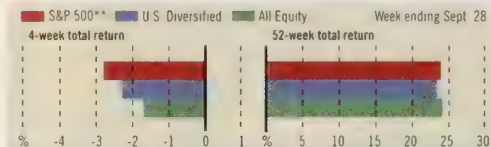
TECHNICAL INDICATORS

	Sept. 28	Week ago
S&P 500 200-day average	1303.9	1301.2
Stocks above 200-day average	30.0 %	34.0 %
Options: Put/call ratio	0.62	0.63
Insiders: Vickers Sell/buy ratio	1.25	1.13

WORST-PERFORMING GROUPS

	Last month %	Last 12 months %
Cosmetics	-30.3	Pollution Control
Furnishings & Appliances	-29.5	Manufactured Housing
Housewares	-24.8	Food Wholesalers
Life Insurance	-20.0	Property-Casual. Insurers
Property-Casual. Insurers	-20.0	Life Insurance

MUTUAL FUNDS



Data: Morningstar, Inc.

**Vanguard 500 Index fund

EQUITY FUND CATEGORIES

Leaders	Four-week total return	%	Laggards	Four-week total return	%
Precious Metals	26.6		Health	-6.3	
Technology	3.6		Pacific/Asia ex-Japan	-5.3	
Japan	3.5		Mid-cap Value	-5.2	
Communications	3.4		Real Estate	-4.8	
Latin America	2.4		Financial	-4.8	
Leaders	52-week total return	%	Laggards	52-week total return	%
Technology	103.9		Real Estate	-5.5	
Japan	97.7		Financial	5.5	
Diversified Pacific/Asia	74.0		Small-cap Value	7.8	
Pacific/Asia ex-Japan	66.9		Domestic Hybrid	9.9	
Communications	63.7		Health	10.3	

INTEREST RATES

KEY RATES	Sept. 29	Week ago	Year ago
MONEY MARKET FUNDS	4.90%	4.86%	5.05%
90-DAY TREASURY BILLS	4.81	4.83	4.37
1-YEAR TREASURY BILLS	5.21	5.26	4.41
10-YEAR TREASURY NOTES	5.96	5.92	4.44
30-YEAR TREASURY BONDS	6.12	6.10	4.98
30-YEAR FIXED MORTGAGE†	7.80	7.83	6.62

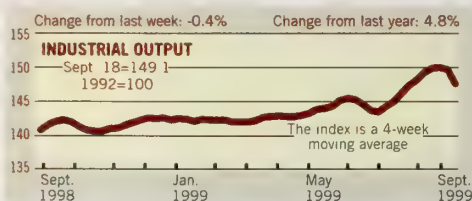
BLOOMBERG MUNI YIELD EQUIVALENT

Taxable equivalent yields on AAA-rated, tax-exempt municipal bonds, assuming a 31% federal tax rate.

	10-yr. bond	30-yr. bond
GENERAL OBLIGATIONS	4.93%	
TAXABLE EQUIVALENT	7.14	
INSURED REVENUE BONDS	5.10	
TAXABLE EQUIVALENT	7.39	

†BancQuote, Inc.

BW PRODUCTION INDEX



Information on each of the index components is at www.businessweek.com.
BW production index Copyright 1999 by The McGraw-Hill Companies

The production index continued to the week ended Sept. 18. The unadjusted index was also down, falling 1.1% from 149.2. After seasonal adjustment, the index fell 0.4% to 148.9, with a dip in the amount of produced energy. Mid-Atlantic region. Rail-freight traffic and coal production, both affected by the heavy rain. Output of steel, aluminum, and oil were also down. Only auto, truck, and lumber production increased.

THE WEEK AHEAD

LEADING INDICATORS Tuesday, Oct. 5, 10 a.m. EDT ► The Conference Board's index of leading indicators likely fell 0.2% in August, after rising 0.3% in both June and July. That's based on the median forecast of economists surveyed by Standard & Poor's MMS, a unit of The McGraw-Hill Cos.

VEHICLE SALES Tuesday, Oct. 5 ► Car companies will begin reporting September sales, which are expected to decline after soaring in August to annual rate of 17.6 million.

FOMC MEETING Tuesday, Oct. 5, ► The Federal Reserve's policymaking Federal Open Market Committee will meet to set interest

rates. Analysts generally expect no change in the current 5.25% federal funds rate. A decision is expected at about 2:15 p.m.

FACTORY INVENTORIES Wednesday, Oct. 6, 10 a.m. EDT ► Manufacturers' inventories are expected to have risen by 0.4% in August after increasing by 0.5% in July. Factory inventory growth is expected to speed up in the second half, adding to economic growth.

INSTALLMENT DEBT Thursday, Oct. 7, 3 p.m. EDT ► Households are expected to have increased their debt by \$5.8 billion in August, after adding \$8.8 billion in July.

EMPLOYMENT REPORT Friday, Oct. 8, 8 a.m. EDT ► Nonfarm payrolls are expected to have increased by 215,000 in September, after posting a small 124,000 gain in August, based on the S&P MMS survey. The unemployment rate is projected to edge up to 4.2%, from 4.1% in August. Wages are expected to grow 0.3%, compared with 0.2% in August.

BusinessWeek ONLINE

For more investment data and the components of the production index, visit www.businessweek.com.

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Business Week / October 11, 1999 195

THE NEW ECONOMY VS. THE BUBBLE ECONOMY

For five years, at least, American business has been in the grip of an apocalyptic, holy-rolling exaltation over the unparalleled prosperity of the "new era" upon which we, or it, or somebody has entered. Discussions of economic conditions in the press, on the platform, and by public officials have carried us into a cloudland of fantasy... Clear, critical, realistic and rational recognition of current problems and perplexities is rare. (Sept. 7, 1929)

Seventy years ago, just weeks before the Great Crash, BUSINESS WEEK made its first appearance with this editorial. The resonance is uncanny. Then, a great debate swirled around the effects of the fast-paced, technology-driven economy of the 1920s. Today, a similar debate is under way, and BUSINESS WEEK is at the forefront of those arguing that information technology is transforming America, and much of the world, into a New Economy. Opposing this are those who see only a Bubble Economy at work, with inflated asset values driving growth—until they inevitably pop. So far, the debate over the New Economy has been marked by the same kind of emotion and caricature that appears to have defined the battle over the "new era." It is time, again, to clarify what the New Economy is and what it isn't, what it can do and what it can't do.

The heart of New Economy thinking is that the safe speed limit for the U.S. economy has increased—somewhat—in recent years. The speed limit for any economy is defined as the fastest economic growth rate that won't ignite inflation. The speed limit is the sum of two numbers—the growth in population and productivity. Population growth in the U.S. has been stable at about 1% for years. But measured productivity, which rose at about 1% a year between 1973 and 1995, has since doubled to about a 2% annual rate, thanks to new technologies and globalization. That surge in productivity means the U.S. economy can now grow at a sustained long-term trend rate of about 3% annually without increasing inflation. That's up

from about 2% to 2½% a year in the previous two decades.

America's economic speed limit has been lifted, but it has disappeared. The economy can go faster but it can also go fast, slow down, or even stop. Technology-driven economies—the "new era" or New Economy, share common characteristics—fast-paced innovation, high productivity, new business models, high growth, low inflation, high equity prices—they are also times of excess, volatility, and dislocation.

That's the danger facing the New Economy today. In the past three years, the pace of growth has exceeded the higher new speed limit. Now there are signs of excess. Leverage is at record highs, be it margin debt, consumer credit-card debt, or corporate borrowing. Bank regulators are worried about lax loan standards. Many dot.com businesses are hiring wildly and chasing unrealistic growth projections. Many investors are day-trading themselves into penury, paying for incredible multiples on a wing and a prayer. Indeed, the nation as a whole cavalierly accepts foreign capital inflows that equal an amazing 5.8% of gross domestic product, a historic high, making the dollar vulnerable.

The Federal Reserve is trying to rein in growth by raising the trend (the new 3% trend) with two rate hikes and appears to be succeeding. Asset prices are easing, and with that, consumer spending will slow. The stock market has been flat for six months, and Net stocks have gone through a big correction. Executive cocktail chatter is of options being underwritten, consumer confidence is falling, and the housing market is cooling. It all spells soft landing. The alternative, of course, is a serious recession. With the Internet providing huge opportunities to cut jobs and save costs, the next surge in unemployment could be disturbing.

A sober look at the New Economy shows that it can generate more growth and jobs than economists thought possible. This is no small thing. But even though the New Economy can go faster, it can also slow down, or even go into reverse.

DR. LEVITT'S RX FOR A NEW MARKET

Securities & Exchange Commission Chairman Arthur Levitt Jr. has a vision for unifying America's fast-changing securities markets, boosting competition, and improving prices for the nation's investors. With the New York Stock Exchange and the Nasdaq set to convert to profit-driven, shareholder-owned businesses and electronic communications networks (ECNs) playing ever-larger roles, Levitt is trying to nudge the industry into a rational, high-tech future. The industry should transcend its many parochial interests and find common ground with the SEC chairman.

Levitt wants open borders and transparent prices among the growing number of markets. He'd like to see a single electronic trading system linking buyers and sellers in all of the

traditional and new electronic markets so investors can get the best prices everywhere. Then the NYSE could make the market in Microsoft, now traded only on Nasdaq, while Nasdaq could trade General Electric, now traded only on NYSE. Markets would move on to compete by offering value-added services, such as faster trades, lower fees, or strategy trades.

Levitt is also worried that for-profit stock exchanges find it hard to regulate themselves when they feel pressure to deliver quarterly profits to shareholders. It's a reasonable concern, and a new regulatory structure might be needed. To most investors, the SEC's suggestions seem eminently reasonable.

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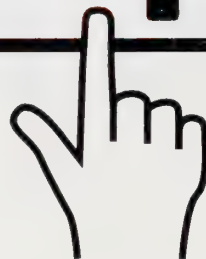


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MIKE

VS.

BERNIE

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TWO BIG BETS. TWO RISKY STRATEGIES.

WILL THERE BE A WINNER?

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NEW INTERNATIONAL
SYMBOL FOR THE
INTERNET.**



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symbol, of course, stands for
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perhaps it should be. You see, few companies
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FUJITSU

Are you both attracted and repelled
by the Internet at the very same time?



Experience tells us the Internet makes people feel a lot of different emotions all at once. And who can blame them? On one hand, the Internet opens their business up to billions of potential customers. On the other hand, it opens their business up to billions of potential hackers.

Not long ago, a pharmaceutical giant came to MCI WorldComSM with this exact dilemma. They wanted to make sure their customers would only have access to their products. Not their research.

As one of the world's largest Internet providers, we deal with problems like these every day and (not surprisingly) have an entire continuum of data services to help solve them. In this case,

MCI WorldCom has an entire continuum of data services on our seamless global network. Here's how we made it work for a pharmaceutical giant.

we recommended they install a hybrid VPN on top of their Frame Relay and Internet service. A Virtual Private Network would keep their research separate from their products by everything from firewalls to encryption codes. And because the data would run on our wholly owned,

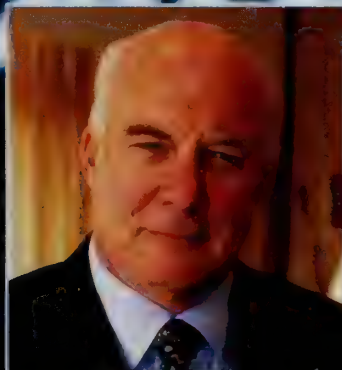
seamless global network, we'd be able to monitor it from one end to the other. No small detail. Especially when you consider only MCI WorldCom owns the entire network between many locations in the U.S. and Western Europe.

All of which made this pharmaceutical giant feel a brand new emotion: relief.

For more information, visit us at www.wcom.com/data2.



MCI WORLD.COM.



COVER STORY

MIKE VS. BERNIE

For both telecom titans, the financial and strategic risks are enormous page 34

Cover Story

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MCI WorldCom's audacious grab for Sprint is more than just the biggest corporate acquisition ever—it could well change the shape of telecommunications in the 21st century. Meanwhile, AT&T must battle back by investing billions more in new technology

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WorldCom CEO Bernie Ebbers has plenty of experience with mergers, but this one will be his biggest challenge ever. For starters, he'll have to win approval from a balky FCC and splice together two mega networks. Add to that the threat of new competitors and some grumblings on Wall Street...

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Its long-distance business is crumbling, and the company's bet that cable is the way out is hitting snags. On top of that, key executives are leaving

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Now you can look for your
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leaving your desk page 77



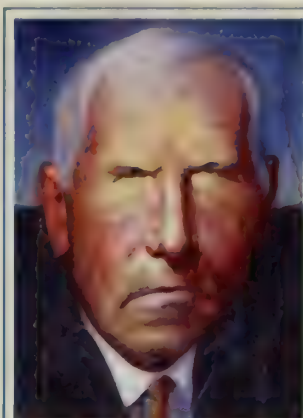
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Startups offering online MBAs aim high

Book Excerpt

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The bizarre saga of Al Dunlap

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How the chain's stores and site mesh

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Up Front

EDITED BY ROBERT McNATT

WEB WARS

ATTENTION, K MART SURFERS

KMART, THE NATION'S third-largest retailer, is preparing to sign a deal worth more than \$50 million to create a new Internet strategy for itself. Sources familiar with the deal say financial backing for a new and improved Kmart.com will come from a Silicon Valley venture-capital firm, Softbank Technology Ventures. The plan is for the new site to be up early next year, and boost online

and in-store sales. Neither Soft bank nor Kmart is talking right now, but Kmart is making the move none too soon. Archrival Wal-Mart has been working to

upgrade its site for months, though it won't be ready for the holiday season. Kmart's current online efforts have lagged behind. Its site doesn't sell a full line of products and is not considered very customer-friendly either. The deal with Softbank, and possibly two other venture investors, aims to change that. And it stands in sharp contrast to Wal-Mart's do-it-yourself Net initiative. Kmart's enterprise will be based in Silicon Valley and be run largely by outside executives.

It's a big step for Kmart, but it plans to keep a majority stake. Still, turning its shoppers into Net surfers will likely take all the help Kmart can get. *Linda Himmelstein*

OIL PATCH

ALAN GREENSPAN —PROTECTIONIST?

FEDERAL RESERVE CHAIRMAN Alan Greenspan rarely lets a speech go by without extolling the benefits of unfettered capitalism and the magic of the market. So what's he doing heading up two obscure boards that provide government-backed credits to hard-pressed steel and oil companies?

In August, Congress established the Emergency Steel Guarantee Loan Board and Emergency Oil & Gas Guarantee Loan Board. Steelmakers were screaming for relief from surging imports, and prices of oil were plunging. Now, steel imports are falling, while oil

prices are rising. Nevertheless, a slew of companies are expected to ask for assistance after the two boards publish application procedures on Oct. 18.

Partly at the behest of Republicans who worried that the boards would throw away money, lawmakers mandated that Greenspan chair both boards. Securities & Exchange Commission Chairman Arthur Levitt Jr. and Commerce Secretary William Daley are also on both of them. Greenspan isn't saying publicly what his feelings are about the arrangement. But in private, he has told confidants that he questions whether any "emergency" exists to justify creating the boards.

Rich Miller



TALK SHOW "Too often, my party has focused on the national economy, to the exclusion of all else, speaking sterile language of rates and numbers..."

—George W. Bush, urging the GOP to address social ills

I-WAY PATROL

YOUR NAME, MY WEB SITE

POLITICAL DIRTY tricks are going high-tech. Preparing for next year's congressional races, one Republican operative is cutting potential GOP opponents out of cyberspace by registering Web domains with their names.

Among recent hits: Representative Bernie Sanders (I-Vt.) and Delaware Governor Thomas Carper, a Democrat.

James Smith, an aide to Republican Conference Chairman Representative J.C. Watts of Oklahoma, conducts the cybersquatting for Newcom Strategy, his one-man

Internet political consignment shop. When someone calls, say, sandersforsenate.



SANDERS

berniesanders.org gets access to reporters who stumbled on the and a clear spin control. The sites are now empty but won't be for

"This is extremely slimy," yelps Smith. "Your own name being stolen

you." Smith counts that pols who don't register their domain names are inept. But Congress may take Sanders' side. On Oct. 7, the House prepares to mark up an anti-cybersquatting bill that would ban "faith" registration of trademarked words—or a person's name. *Lorraine Woolf*

THE LIST ROCK 'N' WEB

It's e-charity, big time. NetAid, an Oct. 9 transoceanic fund-raising concert for the world's poor, webcasts simultaneous concerts in New York, London, and Geneva. NetAid's Web

site, built to handle 60 million hits an hour, may test the Net as never before. Cisco Systems and KPMG Peat Marwick donated \$2 million in cash and equipment. Credit-card donors make contributions online



JEWEL

	WOODSTOCK	LIVE AID	NETAID
DATE	Aug. '69	July '85	Oct. '99
ATTENDEES	450,000	162,000	79,500
TV/RADIO	No live coverage	Audience, 1.4 billion	Audience, 1 billion
WEB AUDIENCE	Huh?	Huh?	125,000
TOP ACTS	Airplane, Dead, Who, Hendrix	Led Zep, Who, U2, Madonna, Sting	Sting, Jewel, Puff Daddy, Bush
SMELLS	Marijuana, mud	Sanctimoniousness	Overheating cables
LOOK	Cotton tie-dye	T-shirts & jeans	Piercings & pocket protector
BAD TRIP	The brown acid	Too much hype	Server crash
RESULT	Lost \$2.4 million	Raised \$72 million for famine relief	To be determined

DATA: NETAID FOUNDATION, BUSINESS WEEK



Apart we perform with distinction.

Together we serve without equal.

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Up Front

RETAIL REVELRY

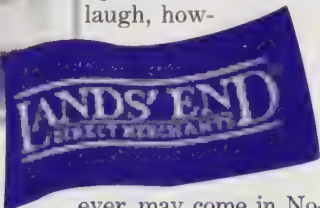
LANDS' END'S END RUN

LANDS' END HAS lost its battle with Germany's government to sell clothes there with the lifetime guarantee it uses elsewhere. But it may win the war, thanks to a clever Internet ploy.

German competitors recently sued the outdoorsy retailer, claiming that its trademarked "Money Back Guarantee, No Matter What" was unfair competition. They won when the German Supreme Court ruled in August that the promise was a violation of law. So out went the guarantee in advertisements and catalogs.

Lands' End considering an appeal to a European Union court. It has also launched a

print-ad campaign lampooning the ruling. One ad depicts a globe with the caption "These are all the places where we can" (offer the guarantee) with a line pointing to Germany saying "Here not!" Another ad announces simply: "We're Speechless!" The last laugh, how-



ever, may come in November, when Lands' End's German Web site debuts. It won't mention the guarantee, but it will link to a separate site that does. Says a company spokeswoman: "All we're trying to do is offer the same service level in Germany that we offer everywhere else in the world." *Ann Therese Palmer*



OVER THERE

ITALY SAYS: DON'T BOIL OUR CHEESE!

ITALIANS ARE IN A FUNK about cheese. They're wondering how to battle proposed European Union restrictions on cheeses made from raw, unpasteurized milk. Now, they may have found a winning strategy: Declare those gorgeous Gorgonzolas national treasures!

Proposed EU legislation has the Italians indignant since 55% of the cheese they eat is made from raw milk. Regulators want both large and small cheesemakers to pas-

PARMA: Rounds of pride

teurize their products. That isn't fair, complains Carlo Petrini, founder of Slow Food, a proponent of traditional Italian foods. Pasteurization ruins the flavor of some cheeses, and the costs of the process could put small cheesemakers out of business—contributing to "yet another handmade cheese becoming extinct." Italy, he says, should not become the land of *vino* and *Velveeta*.

One previously little-used loophole exists: Some Italian foods are labeled with a Denomination of Protected Origin, which certifies their "cultural authenticity" and allows traditional production methods. Slow Food has helped cheesemakers win that rating—circumventing EU regulation—and keeping supplies of Italy's cheeses safe from the European Union's bureaucrats. *Kate Carlisle*

DRAWN & QUARTERED

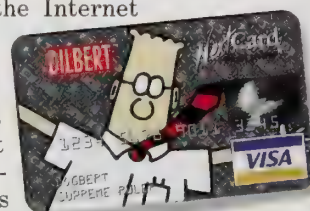


CREDIT CHECK

'JUST PUT IT ON MY DILBERT'

YOU MAY FEEL BETTER BEING called Supreme Ruler than Manager of Wasting Time. Happily, with the Dilbert credit card, you can take your choice.

NextCard, the Internet credit-card issuer based in San Francisco, has high hopes for its Dilbert card, which features characters from the popular office-skewering comic strip. "The folks at United Media were interested in a credit card," says Rich Goebel, NextCard's director of new business development. The Dilbert card, introduced in late September, was the



choice of the syndicate organization.

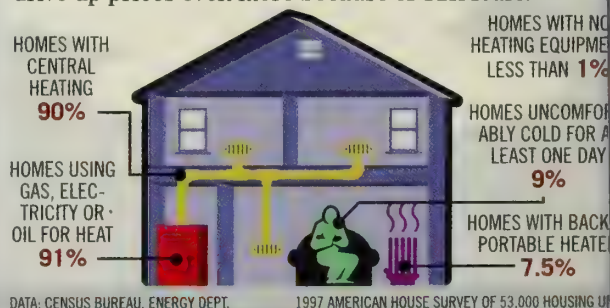
The card features instant approvals, no late fees, frequent-flier miles, and you don't need paper statements, the card pays your "reverse" fee. Applicants apply through the Dilbert Web site can adorn cards with the picture

Dilbert character—and under their name.

The popular character the D-man followed by Dilbert. Among the Supreme Ruler's is applied first choice, followed by Director of HR, King of Cube, and Manager of Wasting Time. Goebel projects the number of cards issued could rise into the "low figures." *Pamela B.*

THE BIG PICTURE

STAY WARM! Home heating oil prices are expected to rise about 25% from last winter. Natural gas will be up about 15%. One unknown: whether antsy consumers will drive up prices even more because of Y2K fears.



FOOTNOTES Men in the workforce: **71.7%** in 1998, vs. **86%** in 1950. Women: **57.3%** in 1998, vs. **32.4%** in 1950

The proof of the pairing:

Forging the third largest global tobacco company.

From Japan to Europe to the U.S., Citibank and Salomon Smith Barney executed a series of complex transactions with speed and certainty.

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Japan Tobacco Inc.

Acquisition of the international
tobacco business of

RJR Nabisco Holdings

May, 1999

**\$7,830,000,000
Acquisition**

Advisor
Salomon Smith Barney

1999

**Foreign
Exchange
Derivatives**

Advisor and Executor
Salomon Smith Barney/Citibank

April, 1999

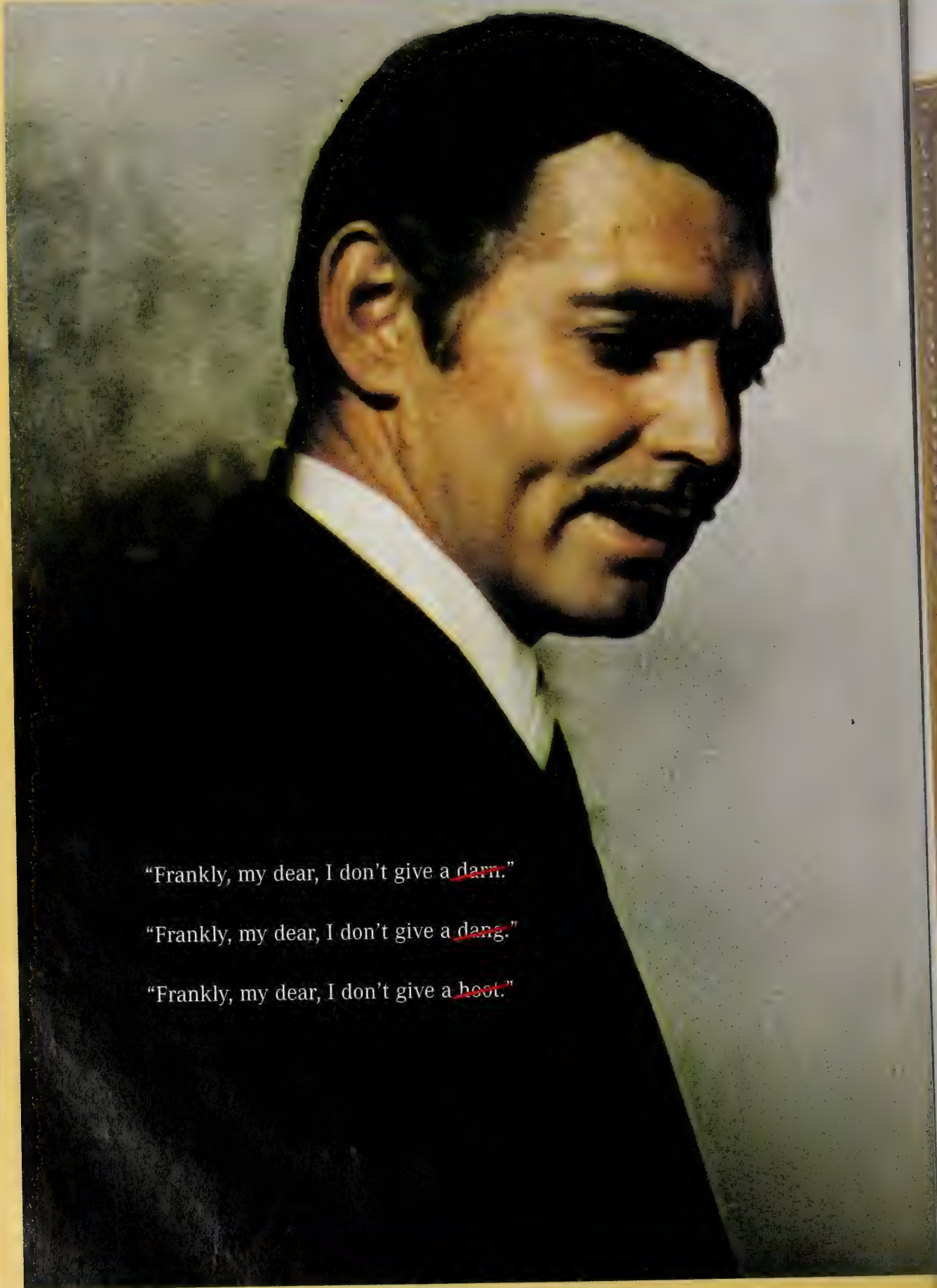
**\$5,000,000,000
Acquisition
Financing**

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Bookrunner, Facility Agent
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"Frankly, my dear, I don't give a ~~damn~~."

"Frankly, my dear, I don't give a ~~dang~~."

"Frankly, my dear, I don't give a ~~hoot~~."



SUNDAY, SEPTEMBER 5, 1976

Arts and Leisure Guide

Highlights & Index to Listings

Theater

BAILEY AROUND THE
SMITHSONIAN

TV Review

Your Weekly Guide to Television

NOV 14, 21

Telly Savalas
as Kojak

Unless otherwise noted

DAYS IN THE TREES—Play
written by David Byrne, directed by
Neil LaBute. 10:30 P.M. (C)

FOR COLORED GIRLS WHO HAVE
SINCE—Play by C. Vann Woodward, directed by
C. Vann Woodward. 10:30 P.M. (C)

MY PEOPLE COME—A musical
play by Paul Osipov, directed by
Paul Osipov. 10:30 P.M. (C)

LET MY PEOPLE COME—A musical
play by Paul Osipov, directed by
Paul Osipov. 10:30 P.M. (C)

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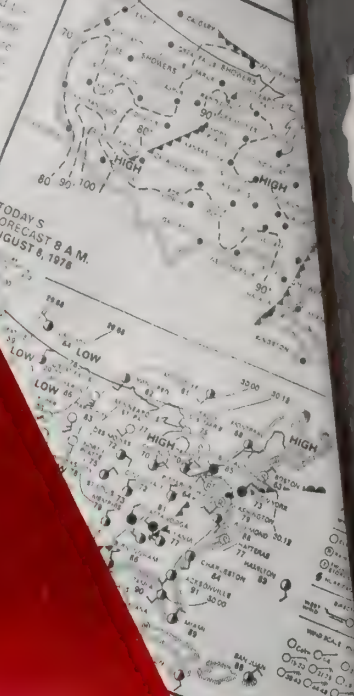
A WOMAN OF NO IMPORTANCE
THE IMPORTANCE OF BEING EARL
WEST—Two plays by Oscar Wilde in
one. Directed by J. Peter Marney.
Open Eve. 8:30 P.M. (C)

Tristate

AMERICAN musical band of the "Little
Orleans" comes to the Tri-State
area. Directed by J. Peter Marney.
Open Eve. 8:30 P.M. (C)

WOMEN SHALING BARN—A comedy by
Tom Lyle. Directed by J. Peter Marney.
Open Eve. 8:30 P.M. (C)

Weather Reports



TODAY'S
FORECAST 8 A.M.
AUGUST 8, 1976

Planets

(Tomorrow, E.D.T.)
Mercury 6:17 A.M. sets 4:44 P.M.
Venus 6:17 A.M. sets 4:44 P.M.
Sun 6:17 A.M. sets 4:44 P.M.
Moon 6:17 A.M. sets 4:44 P.M.
Mars 6:17 A.M. sets 4:44 P.M.
Jupiter 6:17 A.M. sets 4:44 P.M.
Saturn 6:17 A.M. sets 4:44 P.M.
Uranus 6:17 A.M. sets 4:44 P.M.
Neptune 6:17 A.M. sets 4:44 P.M.
Pluto 6:17 A.M. sets 4:44 P.M.

Photos by Vik A Boulder-Street

PASADENA Sept. 4—Viking show the landscape
having landed safely on Mars right degrees.
The new Academy is co-
beginning to be referred
the new Academy" instead of
avant-garde, a term already begun
to lose viability except as an historic
reference.
But still, at that time, a critic not en-
trenched in the New York scene could
find himself in a painful situation when
he suggested that Abstract Expression-
ism was abusing its own success and
that the movement

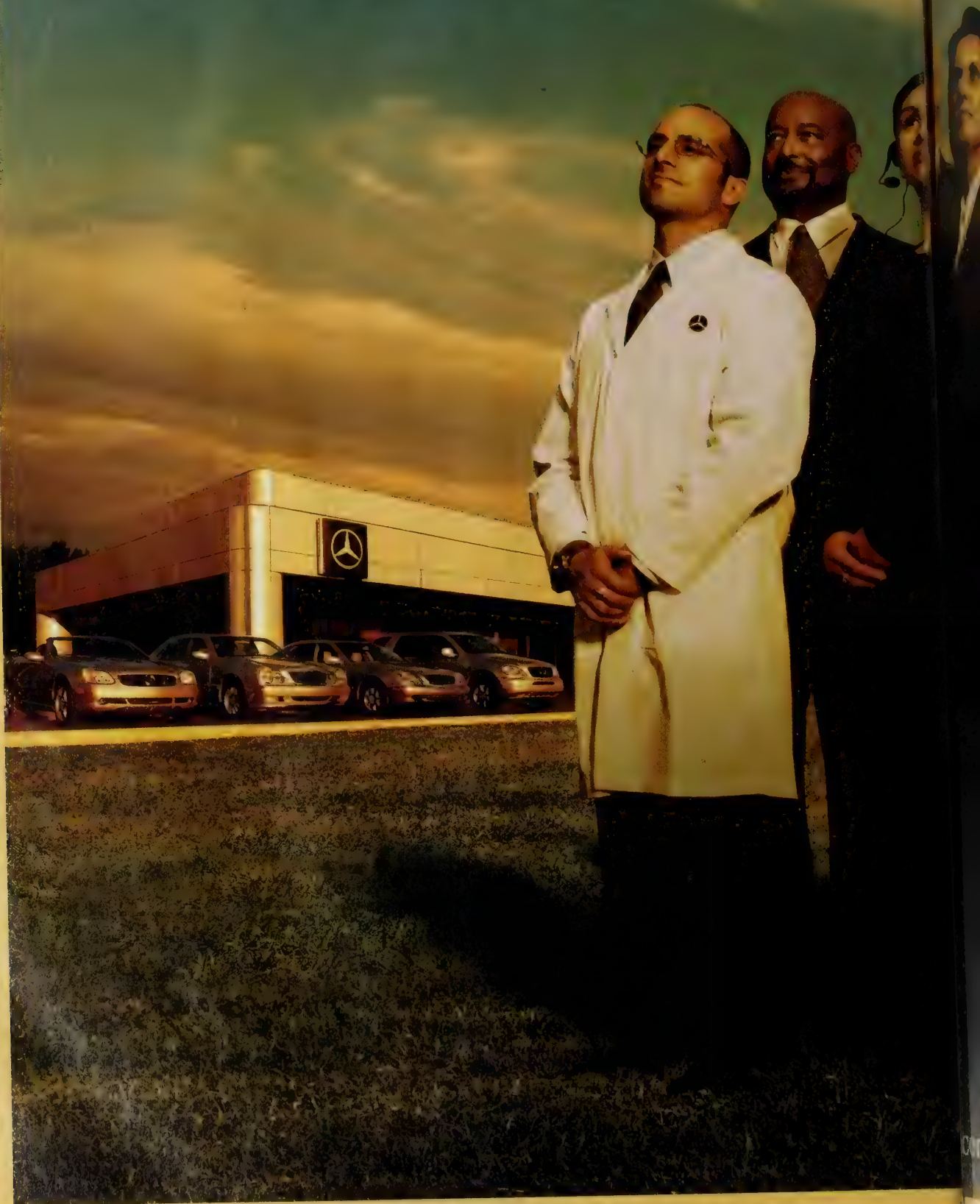
ps
wns
ousel

lease: "Kenneth Keniston,
psychiatrist and educator at
Yale University, heading an
advisory panel of psychia-
trists, educators, students-
and network executives as-
sembled for guidance on the
substantive content of the TV
program." Not surprisingly,
the panel argued through six
all-morning sessions.

New York art scene in the 1950's, Abstract
development



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ABORTION ISN'T THE WAY TO WEED OUT CRIMINALS

This is a particularly frightening commentary on how to reduce crime ("Does abortion lower the crime rate?" Economic Viewpoint, Sept. 27). The suggestion that abortion assists society in "weeding out children" who would likely become criminals moves you into the category of people with extreme political views. While there may be some cause-and-effect relationship between abortion and crime, there must be also thousands of other determinants not mentioned in your summary of the Donahue and Levitt research.

It is probable, for example, that the increase in abortions is happening in geographic areas that are not socioeconomically depressed, therefore diminishing the likelihood that those unborn children would have grown up to become criminals.

Nonetheless, even if these theories can be proven, do we want a society that weeds out children of young and poorly educated single parents? For every petty criminal we lose, we may also be losing great leaders, artists, researchers, or a Harvard professor.

If you are looking for anticrime policies to advocate, please stick to issues of education and empowerment. Undoubtedly, researchers can show a nice correlation between education and lower crime rates.

Jim Joyce
Hoboken, N.J.

The study cited is seriously flawed. While it may be true that the existence of a shrinking number of teens leads to fewer crimes, that is probably a reflection of a general reduction in population growth across the nation and cannot be ascribed to children who never made it into this world because of abortion. How can the authors of this study presume what kind of person the unborn will develop into?

While deciding to have an abortion is a difficult decision for any woman, let's not forget that many who choose abor-

tion are not poor. Also, let's not as that poor mothers who do not have tions will end up with kids who be hoodlums. Many people from disat tagged backgrounds have made it in country without killing and mai Who's to say that the next aborted will be a menace to society, rather the next Bill Gates, Mother Teresa, tin Luther King Jr., or Albert Eins

Mr. Barro quotes: "The main e however, is the reduced frequen crime among those in the 15-to-24 group who did manage to be born grow up." Thank goodness we see be weeding out the right people. can't we give law enforcement a strong economy credit for some of Now it seems we advocate abortion crime prevention measure on an nomic sliding scale. We have taken justice to a new level.

John St. Ger
Plaistow, N

AMTRAK IS ON TRACK TO GET RI OF FEDERAL SUBSIDIES

"Fast train to nowhere?" (Ne Analysis & Commentary, Sept. 27) represented a number of exciting th happening at Amtrak that are part dramatic turnaround.

One of those components is a strat to develop partnerships and new enue sources beyond our passenger b ness. I was dismayed that you port Amtrak's effort to structure revera generating partnerships as a concess In fact, the strategy is deliberate. corporation is aggressively pursuing s new revenue streams and, like any ot business, this diversification should perceived as a strength, not a weakne

The article also implied a need federal operating support nearly dou the real number, and it exaggerated impact of the delay of the high-spe Acela service. For that reason, y missed the fact that Amtrak's bott line is \$11 million ahead of our targ this year, and therefore Amtrak is a track to eliminate the need for fede operating support. The picture the sto

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DIRECTIONS & CLARIFICATIONS

It's a tech stock? Bring it on!" (Business Week Investor, Oct. 4), portfolio manager g Ellis was incorrectly quoted as estimating profits for Juniper Networks Inc. in). He was estimating Juniper's revenues.

wrong chart appeared with the story y gold is precious again" (News: Analysis & Commentary, Oct. 11). The correct rt appears below.

RESTORING THE GLITTER



is for our business is much weaker the facts would suggest.

Governor Tommy G. Thompson
Chairman
Amtrak Board of Directors
Washington

WHO WILL SURVIVE THE COMING E-COMMERCE SHAKEOUT?

"Is that e-commerce roadkill I see?" z, Sept. 27), Robert D. Hof provides interesting perspective on the looming e-commerce shakeout. There are many complex factors that will determine which e-tailers survive. One that has not received enough attention until recently is customer satisfaction.

Forrester Research recently predicted the continued growth of e-commerce relies on logistics—getting the goods to the customer. And a recent Gartner-Sharp survey showed 20% of online customers dissatisfied with the online buying experience. These numbers should serve as a wake-up call to everyone in the e-commerce market space. Time-starved shoppers have too many other options to put up with customer service meltdowns such as confusing sites, delayed deliveries, slow response to inquiries, and billing errors.

Who will survive? Some e-tailers have gained a competitive advantage by building a seamless end-to-end e-fulfillment strategy that ensures a superior online experience, including an easy-to-use Web site, quality brands, great prices, and excellent service. E-tailers without such strategy are wandering blind along the

Information Superhighway—a sure way to end up as roadkill.

J. T. Kreager
SubmitOrder.com
Columbus, Ohio

WHAT'S SEXY ABOUT E.BIZ —AND WHAT'S NOT

My complaint isn't about your selections per se, but the fact that BUSINESS WEEK labels the e.biz 25 as representing e-businesses. In reality, most are e-com-

merce firms. The semantic differences are not trivial.

First of all, e-commerce is a subset of e-business. E-commerce is selling over the Internet and represents an evolutionary change in the way an enterprise does business. E-business affects all aspects of a business (not just revenue creation), and fundamentally changes how business is conducted.

E-business encompasses all the internal business processes of a firm, from simple e-commerce storefronts to



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purchasing and human resources. Also, e-business is largely driven by the burgeoning market for "buy-side" extranet/Internet procurement and supply chain management/business-to-business (B2B), Web-based transactions. It's not as sexy as business-to-consumer (B2C), but it has a much larger market potential and an exponential growth rate. One could even argue that diffusion of B2B will surpass B2C rates within the next year or so.

Amazon.com is, for the most part, an e-business, in large part because of its focus on back-office activities such as procurement. Its customer facing system is superb, perhaps the best. But it's the "buy side" that gives Amazon.com a sustainable competitive advantage. Bottom line: "E-biz" is a lot more than a cute Web storefront.

David Scott Lewis, Director
E-Business Special Operations
Oracle Corp.
Redwood Shores, Calif.

I don't understand those people in "The e.biz 25" (Cover Story, Sept. 27). Their companies are losing millions of dollars, and they look so happy!

Takeshi Yoshida
Torrance, Calif.

Jeff Bezos, Meg Whitman, and Tim Koogle spend more time on the front cover of magazines than all the world's supermodels. Could BUSINESS WEEK have a Bezos-, Whitman-, and Koogle-free fourth quarter, please?

Matthew B. Brady
Lemont, Ill.

DON'T BE TOO HARD ON CAMPAIGN SOFT MONEY

In "The real truth about campaign cash" (Government, Sept. 27), I thought your comparison of campaign spending to the overall economy was a refreshing way to reasonably look at the recent increases in political spending.

However, while I agree that we need campaign-finance reform, you have omitted an important factor that has helped drive the system to its current state. Election laws currently allow unlimited spending by unions, including extensive media buys targeting specific candidates. As long as we consider this to be free speech, we must allow alternate methods of fund-raising by the opposition (i.e., soft money).

If there is any hope to bring about campaign-finance reform, this issue must be addressed. Perhaps one way would be to require that individuals or organi-

zations consider any expenditures (including media buys) that mention the name of a specific candidate as campaign contributions, subject to the same limits as other individuals or political action committees.

Martha Chayet
Manchester, Mass.

EVEN IN THE NEW ECONOMY, SOMEONE HAS TO GROW CROPS

I found "The prosperity gap" (Economics, Sept. 27) both eye-opening and alarming. Two points not included in your analysis:

1) Coal must be dug, it must be shipped to the steel plants so steel can be made, then sent to the auto plants to become a car, which must be transported to the final consumer. Cardealer.com might provide the consumer with the means to find the best deal around, and the auto manufacturers might finally provide mass customization and build to order. But humans (of the old economy) will still be needed. If everyone becomes a programmer and systems analyst, who will provide the goods?

The analogy to the farms becomes critical: Someone still had to stay on the farms and grow the crops that fed all the industrial workers. Wages will have to rise to induce labor to continue with the old economy. What good is a \$1 billion IPO if no nurses are available to treat your heart attack?

2) Those tens of millions of the old economy who will be swept away (similar to the middle-manager bloodbath of the 1990s) must be attended to. This is a legitimate endeavor for the government—to provide retraining, relocation, and incentives for "new economy" companies to locate where the old economy labor is. Not everyone wants to live in Silicon Valley (nor could everyone). By not addressing the problem of industrialization at the turn of the century, urban crises were created. This time let's pro-act, not react.

Paul Herbig
Professor of Marketing
Tri-State University
Angola, Ind.

You did an excellent job of highlighting examples of relative prosperity in both the "old" and "new" economies. However, while you noted agriculture was part of the "old" economy in the late 19th and early 20th centuries, you neglected to include it in the "old" economy of today. I feel production agriculture belongs there today as well.

Most family farmers and ranchers

have lost relative position in the economy during the 1980s and 1990s. As a result of society placing a relatively low value on its food supply at the farm gate compared to the capitalization of eBay, Amazon.com, Yahoo!, etc., to the value of farm products produced in California in 1998), farmers and ranchers are receiving lower prices for a unit of production equivalent to that of 20 or 30 years ago. Additionally, many of their investment portfolios are almost exclusively agricultural real estate, which hasn't kept up with the booming stock market. Farmers and ranchers generally work long hours with little net return for their labor or any meaningful return on investment or assets.

In 1975, I left what was then I.W. Witter Reynolds Inc. and entered the world of production agriculture. I chose the altruistic idea that this was an honorable profession and one that had high intrinsic value to society. In retrospect, I would have been better off financially to have pursued a more important career like whitewater rafting or investing in sports memorabilia.

Jack Harlan
Susanville, Cal.

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H
noir of Ronald Reagan
mund Morris
om House • 874 pp • \$35

BIOGRAPHY OF WAR WITH ITSELF

Believe me, I longed to be the first reviewer of *Dutch: A Memoir of Ronald Reagan* to find in author Edmund Morris' use of "fictional" characters, including himself, to tell the life story of one of the Presidents of the 20th century. Well, in his Henry IV plays, didn't Shakespeare use a fictional character like Falstaff to disclose truths about historical figures, the young Prince Hal? And didn't Reagan, the Hollywood actor, constantly make himself up? So couldn't Morris debut a heroic protagonist in order to shed light on a president that the author had come to know so well?

As I can only offer some advice if you decide to wade into this long and often confusing tome: Read the foreword, then skip immediately to chapter 28. In this 23-page snapshot that covers the period from Reagan's 1981 inauguration night until he was shot months later, Morris is exquisite, living the promise of what the biography could have been. The author manages to imbue this one chapter with the sense he was given—10 years of regrettably access to the Gipper, wife Nancy, Reagan's children, and all his top aides and closest associates. Then keep reading until you get to the epilogue. You will see an author sailing (and sometimes adrift on) a sea of anecdotal riches. The material is so bountiful that the reader senses why Morris may have taken this way in the first 400 pages. And thankfully, the author largely abandons the "let's invent me" technique.

Done too soon, either. For this was supposed to be a book about Reagan, not Edmund Morris. As others have observed, most of *Dutch* is a tortured amalgam of fact and fiction that constantly leaves the reader wondering: Did this really happen or is Morris making this part up? Worse, the au-

thor drones on about his own made-up life (and really, you just don't care) at the expense of Ronald Wilson Reagan's, whose journey from Tampico, Ill., to Hollywood, to Sacramento, to the White House is the stuff of a rich American tale.

It's not that the insights aren't here. Reaganites fume that Morris needlessly deprecates Reagan as a buffoon whose rise to President still mystifies the author. Not true. Provided you can get through the author's constant sidetraps into his own bogus life, you won't be mystified any more by Ronald Reagan. On that score, Morris is a genius.

Of the Gipper's early years, Morris writes, "There was something attractive about the simplicity of his enthusiasms—Eddie Cantor, the Olympics, last night's social, next week's game—and his urgent desire to tell us what we already knew." As President, Reagan prevailed, Morris explains, "by simply not noticing obstructions. Thus, when one deflects him, he assumes he has changed course voluntarily, and if it rolls out of his way, shows neither surprise nor gratitude."

There are some new revelations: Morris says that Reagan lost half his blood when he was shot and was closer to death than most people realize. His portrait of Ronnie as a young man is amusingly insightful. Reagan appears as a handsome, earnest, but somewhat boring guy. An actress-acquaintance, Joy Hodges, tells a story of trying to avoid going on a horseback-riding date with him by hiding in a closet. When Reagan arrives at her door, "he just keeps ringing, ringing, ringing. I thought he'd never go away.... You can't believe that purposefulness!" First wife Jane Wyman

was often driven from the breakfast table by Reagan's attempts to read whole pages of the morning newspaper to her.

One of Morris' best insights: Reagan never stopped viewing life as he did during his summers spent as a teenage lifeguard at Lowell Park beach. "The swimmer enjoys a loneliness greater, yet oddly more comforting, than that of the long-distance runner. One tunnels along in a shroud of silvery bubbles, insulated from any sight or sound other than vague perspectives of water, and the muted thunder of one's own arm strokes and breathing. Others may swim alongside for a while, but their individuality tends to refract away, through the bubbles and the blur. Often I have marveled at Reagan's cool, unhurried progress through crises of politics and personnel, and thought to myself, he sees the world as a swimmer sees it."

And Reagan was hardly a simpleton. "The perfectly paced jokes, the easy, apt quips scribbled on the bottoms of thousands of photographs, and above all the clarity of his diaries, letters, and speech drafts all testify to the fact that he retained a useful intelligence through two terms as President," Morris writes. The author's conversations with Reagan elegantly reinforce this point.

Clearly, Morris should have gone one way or the other. A good writer, he could have woven his research into a truly outstanding biography. Or he could have gone for what Joe Klein attempted in *Primary Colors* or Robert Penn Warren did in *All the King's Men*, writing a historical novel to reveal higher truths. What we are left with here is the literary equivalent of an elaborately staged historical production, marred by an impromptu puppet show put on for no apparent reason. While not exactly a disgrace—for this book will be referenced for years to come by historians—it's truly one of the strangest biographies to emerge in years.

BY DOUGLAS HARBRECHT
News Editor Harbrecht has covered U.S. politics for over 20 years.

Dutch

—A MEMOIR OF—
RONALD REAGAN



Edmund Morris

DESPITE SERIOUS FLAWS, MORRIS' BOOK DOES BRING ALIVE WHAT MADE REAGAN TICK

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the next generation of intel architecture will drive the next generation of e-business. companies can already sense the intense demands of the internet economy—and it's only the beginning, as these pressures grow, so too does the need for a platform flexible and scalable enough to support years of sustained internet growth. the new intel itanium™ processor will enable companies to transact secure, personalized e-business with greater speed and dependability. virtually every major operating system and hardware vendor is already planning solutions for it, and a \$250 million industry venture fund is paving the way for richer, more diverse applications. available in the year 2000, intel itanium processor-based solutions will become the catalyst for a new level of e-business. [explore the technology of e-business → intel.com/ebusiness](#)

intel

BY STEPHEN H. WILDSTROM

PROJECTORS GET POSITIVELY PETITE

Slimmer video models that are easier to use can save your back on the road

Not long ago, traveling with a video projector for your presentations was something you wanted to do only if you had Sherpas to carry the gear and an audiovisual technician to run it once you got there. But in the year since I last visited the subject (Tech & You, Nov. 23, 1998), things have changed dramatically for the better. The lightest projectors have lost a third of their weight and are now well below five pounds. The units are easier to use than ever. And the cheapest lightweights go for less than \$3,000.

Projectors are not for everyone. But if you're tired of having half a dozen people huddle around your laptop to squint at your spreadsheets or of struggling to get the cranky old projector at your customer's site to show your PowerPoint slides, you may be the ideal customer for one of these sleek new units. If you can get by with a three-pound mini notebook computer, such as a Sony VAIO 505, you can pack a laptop and a projector with less weight, for less cost, and in about the same space as a top-of-the-line presentation notebook that was popular two years ago.

TOP SHELF. The sexiest of the new projectors is the LP330 Dragonfly from InFocus Systems Inc. (800 294-6400 or www.infocus.com). Weighing in at 4.8 pounds and just 2.5

inches thick, the Dragonfly will easily share a bag with a laptop and the required cables and accessories. In addition to an aesthetically pleasing design, its features easily put it at the top of this class.

Of the three laptops I tried, the Dragonfly is the only one with a zoom lens. A zoom is a trade-off: It adds

new projectors, it offers true plug-and-play convenience, synchronizing itself automatically with your notebook's video output. It comes with a wireless remote that both controls the projector and serves as a mouse for your laptop. You also can attach a wired mouse, with either a round PS/2 plug or the newer universal serial bus. All this convenience does not come cheap: At nearly \$6,000, the Dragonfly is the Mercedes of the field in more ways than one.

The model MP1600 is the first projector from Compaq Computer Corp. (www.compaq.com/products/projectors), and it is a striking but curi-

ous product. It has a vertical design, like a standard projector set on its side. While that makes it look a bit odd, it has the advantage of raising the lens, so that less distortion-causing tilt occurs in many setups. And at just over four pounds, it's the lightest in the field. The biggest drawback is the lack of a remote. You can partly

overcome that disadvantage by using a wireless remote mouse with your laptop that makes for an unneeded hassle. The Compaq is also only projector without a port for standard broadcast video. It requires a snap-on accessory to that capacity. For presentations, this omission isn't a deal, but it complicates entertainment use of the projector. Set up a portable screen, hook up a DVD player or VCR, plug the audio into your stereo system, and you have an instant home theater.

In the company of other projectors, the InFocus Scout is an

duckling: It's a bit out of design flair, but a sub-\$3,000 price tag makes up

a lot of ugly.

Of course, getting a price that low requires compromises bigger than uninspired industrial design. Scout puts out less light than others, meaning images are more likely to be washed by ambient light. Its resolution is lower, and it uses older LCD technology rather than the Texas Instruments Digital Light Processing used by the Compaq and InFocus. That makes its pictures a less crisp, especially when generated by a laptop with 1024 by 768-pixel resolution. But the Scout is a top pick for a budget-minded buyer.

There will be more ultra-light projectors hitting the market soon. Later this fall, NEC Technologies will offer a 5.5-pound projector that projects out an extremely bright 8,000 lumens. For road warriors grown weary of lugging around heavy projectors taking their chances with the gear they find at their destinations, this is a welcome improvement.

DRAGONFLY: The zoom lens adds versatility



THREE LIGHTWEIGHTS

	COMPAQ MP1600	INFOCUS LP330	LIGHTWARE SCOUT
WEIGHT	4.2 lb.	4.8 lb.	5.3 lb.
DIMENSIONS	2.5 x 10.5 x 9 in.	8.75 x 9.75 x 2.5 in.	7.5 x 10.5 x 3.9 in.
BRIGHTNESS	600 lumens	650 lumens	500 lumens
RESOLUTION	1024 x 768 pixels	1024 x 768 pixels	800 x 600 pixels
PRICE	\$4,500	\$5,500	\$2,995

DATA: MANUFACTURERS

complexity, cost, and weight, but without it, the size of the projected image depends entirely on how far from the screen the projector is placed—and that's not always something that you can control, especially when you are traveling.

The Dragonfly gives a presenter maximum flexibility in other ways. Like all of the

ous product. It has a vertical design, like a standard projector set on its side. While that makes it look a bit odd, it has the advantage of raising the lens, so that less distortion-causing tilt occurs in many setups. And at just over four pounds, it's the lightest in the field. The biggest drawback is the lack of a remote. You can partly

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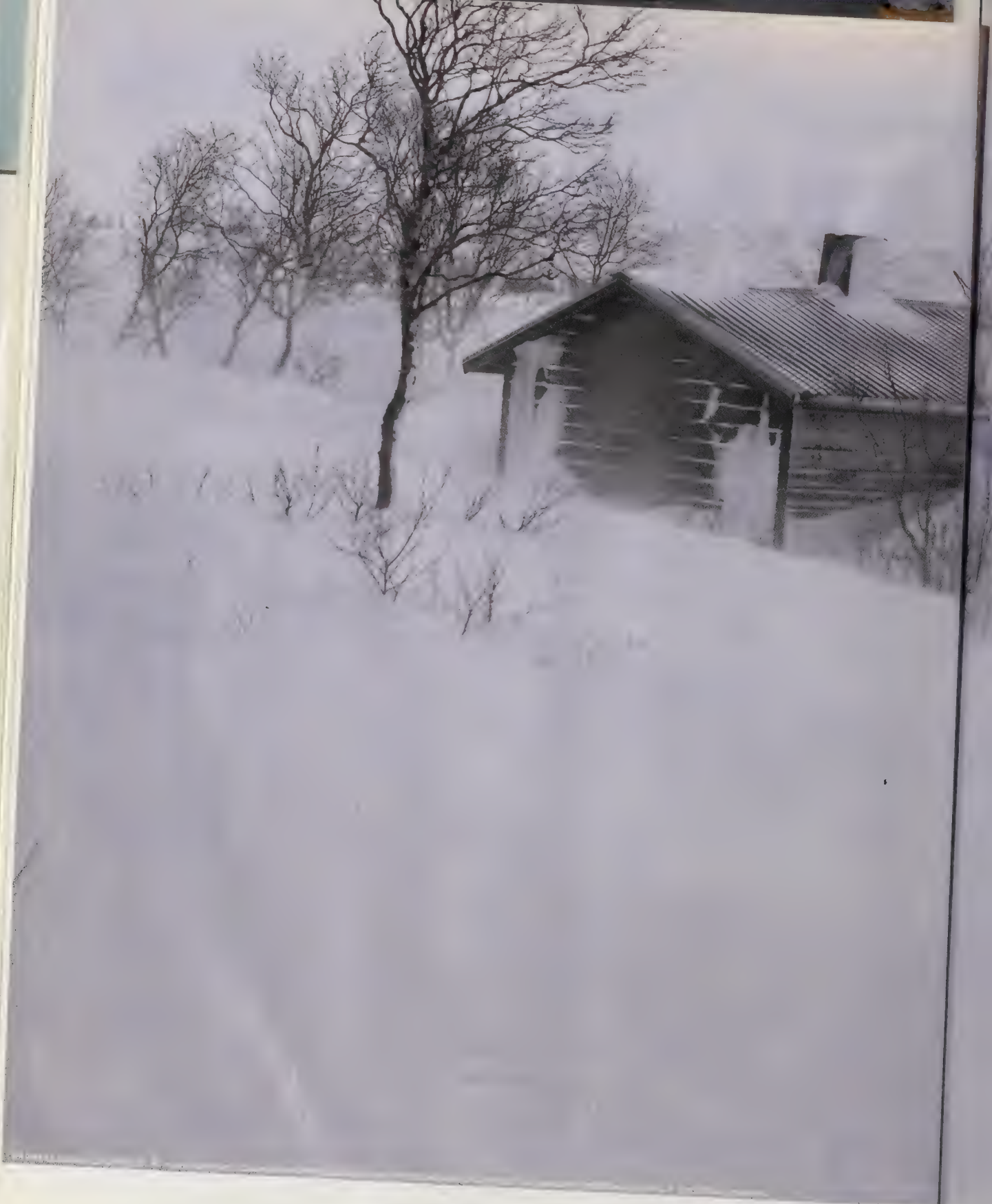
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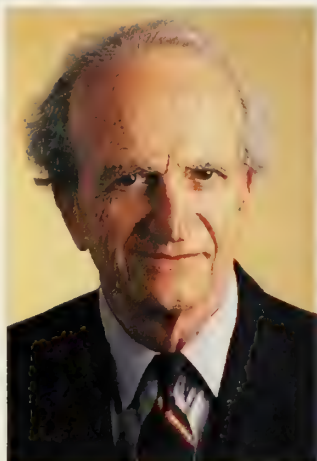
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Quantum

BY GARY S. BECKER

WHAT PRICE POLLUTION? LEAVE THAT TO A GLOBAL MARKET



FAIR PLAY:
The Kyoto pact
limits U.S.
greenhouse
gases but lets
poor nations
off the hook.
A market in
emission
rights would
help everyone

Gary S. Becker, the 1992 Nobel laureate, teaches at the University of Chicago and is a Fellow of the Hoover Institution

The revolutionary U. N. Kyoto Protocol of December, 1997, to cut emissions of carbon dioxide and other greenhouse gases has been approved by well over 100 countries, and it was signed by President Clinton last November. It has strong support from Vice-President Al Gore, who also backs other stringent controls over fossil fuels.

Yet Kyoto is a bad agreement, even if one accepts the still-to-be-proven claim that industrial emissions are causing global warming. Fortunately, this protocol is being held up in the U. S. Senate by a Republican-led opposition. This and other environmental issues may become a major point of contention between Republicans and Democrats in the coming Presidential election.

This protocol requires most industrial nations to reduce their carbon dioxide and other greenhouse-gas emissions during the coming decade to about 5% below 1990 levels. The U. S. must drop to 7% below its 1990 level, which may seem like a small reduction but does not tell the whole story. Since U. S. emissions have increased greatly—along with industrial output—since 1990, the U. S. would have to reduce emissions by more than 25% from levels likely to be attained by the end of the century.

Even worse, thanks to politics, the protocol exempts more than 130 countries, including Brazil, China, India, and Mexico, from any restrictions on their industrial pollution. As a result, the Kyoto approach would induce a shift in the production of polluting industries from developed countries.

SCRUBBERS. Shifting the emissions from industrial to emerging markets will not help reduce worldwide pollution, since that depends mainly on world production of greenhouse gases, not their source among countries. Indeed, this reallocation of production may even worsen pollution, since developing nations have weaker requirements than rich countries for scrubbers and other control devices that reduce emissions of harmful gases.

Moreover, the opposition by unions and employees in the U. S. to the transfer of production to Mexico and other emerging markets would be justified in this case. For the transfer would not stem from economic efficiency or international specialization but would be artificially created by the preferential treatment these nations received at Kyoto.

Fortunately, changing the protocol can

help poorer countries without using artificial incentives to shift production. Instead of emissions quotas on the outputs of developed nations alone, all countries should receive allowances on greenhouse-gas emissions. The total number of these allowances could be fixed at any desired level—say, the 1990 world output of these gases. Developing countries could be favored through receiving much more generous allowances relative to their 1990 production levels than developed countries.

FOR SALE. The most important change in the Kyoto Protocol should allow all greenhouse-gas allowances to be freely bought and sold the way sulfur dioxide emission rights, issued by the Environmental Protection Agency, are sold on the Chicago Board of Trade. Such a system of quotas can work best with a world market. All countries would be permitted to trade them on this market, even when rights are sold to companies in other nations. The price of rights during any month would be determined by market supply and demand for rights at that time.

Poorer nations that receive quotas beyond their needs would earn income by selling excess quotas in this market. They could spend the revenue on education and other investments that would speed up their economic development.

Similarly, companies in developed economies could buy additional rights on this market. In this way, the efficiency of the international division of labor would be preserved, and richer nations would be induced to transfer revenues to poorer countries.

These rights might end up being traded on exchanges in various countries, the way rights to oil and other commodities are presently bought and sold. An international body would be required to take responsibility for the difficult task of monitoring compliance and penalizing violators, but enforcement of compliance is a challenge under a tax or quota system.

The evidence on global warming is too weak and ambiguous to justify massive work cutbacks in carbon dioxide and other greenhouse gases. But even were this evidence convincing, the Kyoto Protocol is a bad agreement and should be altered. The best approach is through a worldwide system of tradable rights in the emissions of these gases.



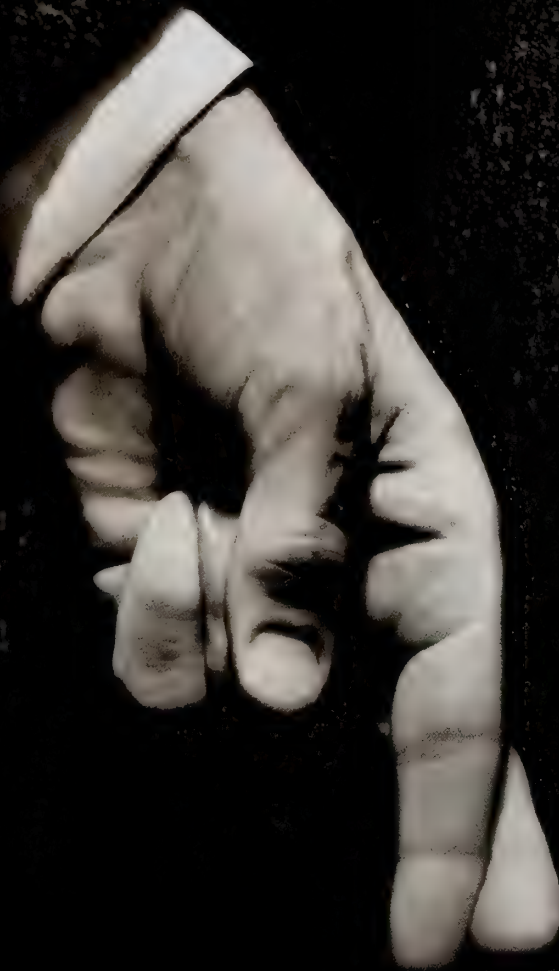
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BY GENE KORETZ

AN INFLATION CONUNDRUM

Are housing costs really slowing?

Analysts monitoring U.S. housing inflation have been doing a double take. On the one hand, such items as home prices and interest rates that presumably influence shelter costs have been picking up steam, with the tabs for similar-quality houses running about 5.5% above year-earlier levels. On the other hand, the housing costs component of the consumer price index is up only 2.5% or so year-over-year (chart).

This divergence is of more than passing interest. The deceleration in core consumer inflation (excluding food and

posed to reflect what they would pay if they were renters. And these imputed rents are extrapolated from a survey of rental homes that "look like" the stock of owner-occupied homes.

This is important because home prices and rents often move in opposite directions. As home sales accelerate, they draw people out of the rental market even as they push up home prices. And less demand for rental housing causes rents to weaken.

Notwithstanding some hot rental (and housing) markets in cities like New York, Chicago, and San Francisco, that's exactly what has been happening. While homeownership nationwide has reached new highs, observes Mellman, the absolute number of renters has declined since last year. And with fewer renters and an upturn in the construction of single-family and multifamily housing, overall vacancy rates have been edging higher—thus slowing rent increases and the housing component of the CPI.

The irony is that this seemingly benign effect on inflation may be reversed over the next year. If, as Mellman thinks likely, home sales slacken in the months ahead as the economy slows and higher rates bite, then households will start to shift back to the rental market. The upshot could be rising rents and a pickup in housing inflation.

In short, inflation in the housing market can give a misleading message to the financial markets. As economist Joseph Carson of Deutsche Bank observes: "It tends to make inflationary pressures look too low during housing cycle booms and too high during busts."

DON'T WAIT FOR THE DATA

Stocks often rise on "release days"

When the latest estimate of gross domestic product in the second quarter came in lower than expected, the stock market rallied. When the monthly purchasing agents' report showed stronger growth than the market anticipated, stock prices slumped. Given such volatility, should potential buyers of stocks wait until after the release dates of economic data rather than taking a position before they are released?

Not according to economist Jan Hatzius of Goldman, Sachs & Co. Analyzing stock market moves in the wake of the releases of key economic indicators—employment, advance GDP, retail sales, the consumer price index, etc.—he

found that the average change in stock prices on release days, compared to nonrelease days, was on the upside.

The explanation: Most investors are risk averse and therefore more reluctant to buy stocks prior to data releases could cause volatility. This lowers demand and tends to depress prices. If cause consensus market expectations are correct on average, however, prices on release dates typically recover "relief rally" as investors breathe a sigh and climb on board.

The bottom line is that investors are going to get into the market before release dates receive a sizable risk premium for their courage. On average, Hatzius calculates, such investors have boosted their earnings by a fifth of a percentage point on those days.

WHY AMERICA IS SITTING PRETTY

It's not just high productivity

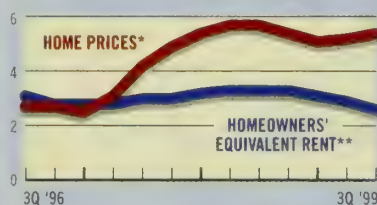
The U.S. boasts higher living standards than virtually all industrial nations. But as a recent analysis in *Monthly Labor Review* by economists Bart van Ark and Robert H. McGuckin of the Conference Board indicates, that doesn't necessarily mean it leads to a pack in labor productivity. Indeed, they find that several nations, such as Belgium and France, had higher productivity levels in 1997 than the U.S.

The likely explanation is that labor market rigidities and relatively high wages in Europe have induced many employers there to substitute capital for labor, boosting productivity. Although capital investment is also strong in the U.S., however, unemployment is much lower. Americans work longer hours, and more people (including low-skilled workers) are in the labor force. The upshot is that the

U.S. enjoys much higher per capita income, or GDP, which is the usual measure of living standards.

Japan's low unemployment and long working hours have also allowed it to post higher per capita GDP than Europe, even though it lags both the U.S. and Europe in productivity.

TWO WAYS OF LOOKING AT HOUSING INFLATION



▲ PERCENT INCREASE, YEAR-OVER-YEAR

*AVERAGE HOME PRICE CHANGE IN REPEAT SALES

**COMPONENT OF CONSUMER PRICE INDEX

DATA: OFFICE OF FEDERAL HOUSING ENTERPRISE OVERSIGHT, LABOR DEPT.

energy prices) this year to less than a 2% annual rate is often ascribed to rapid technological change and declining import prices. But a lot of it is due to the weak performance of housing costs, which account for 35% of the core CPI. If the measure of such costs is faulty, then inflation is being underestimated.

That, in fact, is the view of L. Douglas Lee of Economics From Washington. Lee blames a new methodology adopted by the Labor Dept. last January to estimate owners' housing costs, or "homeowners' equivalent rent," which accounts for the bulk of housing costs in the CPI. Noting that Labor statisticians admit that there may be a problem with new sampling techniques, he thinks inflation in the first half would have been at least a quarter of a percentage point higher if housing costs had been measured more accurately.

Even if this is so, however, economist Robert E. Mellman of J.P. Morgan & Co. thinks measured housing inflation would still have slowed. In the CPI, he notes, owners' housing costs are sup-

AN ECONOMIC SCORECARD



► PERCENT OF U.S. LEVEL, 1997
DATA: BART VAN ARK AND ROBERT H. MCGUCKIN

JAMES C. COOPER & KATHLEEN MADIGAN

DO WONDER THE FED HAS A FOOT ON THE BRAKE

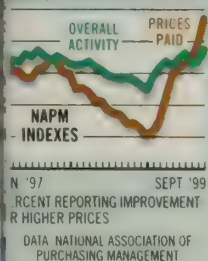
Global recovery is nudging demand up, tilting policy toward another hike

U.S. ECONOMY

Give the Federal Reserve credit: It has found a way to inject some excitement into keeping interest rates un-
ged. As widely expected by everyone from traders
Wall Street to your next-door neighbor, the Fed held
s steady on Oct. 5, after quarter-point hikes in
June and August. But that still didn't cut the
kets any slack. The Fed announced a shift in the di-
on that policy is leaning. Instead of having no
lection for its next move, the Fed said that policy
ow biased toward higher rates. Although the Fed's
ement strongly suggested that it would not make a
e before its next meeting on Nov. 16, Wall Street
t remain nervous about another hike.

That policy shift, combined with recent robust eco-
omic data, strongly argues that this current round
ed tightening still has a ways to go—perhaps even
er than the markets now expect. That's because
he first time in nearly two years, U.S. and global
omic forces are aligned in a way that will serious-
est the belief among many Fed policymakers that
U.S. economy can continue to grow as strongly as
as without generating inflation.

PRICE PRESSURES ARE ING, SAY PURCHASERS



To be sure, there were plenty of reasons not to hike on Oct. 5. Pricing pressures further back in the production process, reported most recently by the nation's purchasing managers (chart), have not traveled to finished goods. Also, credit quality spreads have widened in recent weeks and stock prices have sagged, both suggesting tighter financial conditions. Moreover, the prevailing philosophy at the Fed, which was clear from its Oct. 5 statement, is that faster productivity growth is helping to absorb cost pressures. Clearly, the inflationary potential of the economy has been sharply reduced—not only by technology-driven productivity gains but also by past deregulation and sound anti-inflation policies.

A GLOBAL RECOVERY outside the U.S. changes everything, especially since spending within the U.S. is cooling off as policymakers had wanted. The rising strains on the labor markets were the deciding factor in the Fed's policy shift. Now those strains will

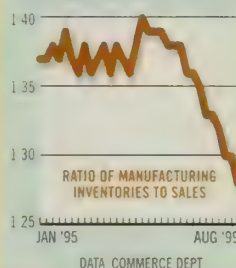
only intensify, particularly since the global upturn is looking stronger than expected. For example, Japan's closely watched Tankan survey of business activity showed the largest quarterly rise in business sentiment in 12 years, and third-quarter economic growth is looking better than expected. In Germany, factory orders in August jumped by a surprisingly large 5.1%.

Why is all this bad for the inflation outlook? First of all, stronger world demand is absorbing excess global capacity, reversing last year's weakness in commodity prices. Second, healthier foreign economies are sure to attract more capital at the expense of the dollar and U.S. assets, which were buoyed last year as investors sought the relative safety of

U.S. financial markets. The greenback, already down against the yen, is now losing ground to the euro. The strong dollar has been a key inflation deterrent.

Most important, the global revival is boosting U.S. exports, which are reigniting U.S. manufacturing activity. Last year's factory slowdown resulted in falling capacity utilization and reduced pressure on prices of U.S.-made goods. The surprisingly strong September report from the purchasing managers suggests that the factory recovery will be faster than anticipated, especially since manufacturers are not carrying nearly enough inventories to meet demand (chart).

FACTORY STOCKPILES ARE THE LEANEST ON RECORD



THE MANUFACTURING REBOUND makes a strong case that economic growth will not ease back from its recent 4% trend anytime soon. Manufacturing is a key 20% of U.S. output, and the economy has never slowed when factory production is accelerating, as it is now. The latest evidence: The National Association of Purchasing Management's index of industrial activity jumped sharply in September, to 57.8% from 54.2% in August. The index, a composite of several measures, is at its highest level in nearly five years.

The NAPM reported exceptionally strong order activity last month, and more companies reported rising export orders than at any time since March, 1997, before the Asian crisis. But what undoubtedly caught the Fed's attention was the NAPM statement that "We see continued strengthening in prices with pricing pow-

er apparent in a broad base of commodities." The most companies in 4½ years report paying higher prices. The NAPM's September survey of nonmanufacturing industries showed a similar uptrend in pricing.

The problem is, with manufacturing now accelerating amid relentlessly strong demand, these costs will only continue to grow. That's especially likely since factory output will have to respond to a growing need for businesses to build up their inventories—and not for reasons related to Y2K. In a special survey, the NAPM says only 38% of responding companies plan to build Y2K-related inventories. And of those companies planning such additions, Y2K inventories would be only 23% of their total stock levels.

Instead of Y2K precautions, the biggest influence on inventories will be that stock-building by businesses during the past year has slowed to a pace that is insufficient to match demand. Rebuilding those stock levels will keep factories increasingly busy in coming months, adding substantially to economic growth.

IN THE MEANTIME, consumers are already adding substantially to economic growth. In August, consumer spending rose a large 0.6%, even after the figures were adjusted for inflation. And households continue to spend far in excess of their income gains, with real aftertax earnings up 0.5% in August. In the past 12 months, incomes rose 3.7%, while spending soared 5.5%.

The gap between spending and incomes is still financed by installment credit and gains from the stock market and home equity. The windfall nature of wage gains suggests why the spending spree has been concentrated in goods (chart), especially big-ticket items such as autos and furniture. Third-quarter sales of cars and light trucks were the highest in 13 years.

The big question for the Fed is whether its past actions will have any effect on consumers. But even housing—one of the first areas affected by rising interest rates—remains quite strong. In August, new single-family homes sold at an annual rate of 983,000, up 2.9% from July's pace. The third quarter is on track to post the best quarterly sales pace for new-home sales on record, even though mortgage rates over the summer were a percentage point higher than they were at the start of the year.

The enduring strength of the consumer sector—its attendant demands on labor markets and production capacity—has to be a concern for policymakers worried about price pressures. Add to that the inflationary implications of the global recovery, and it's easy to see why the Fed's job may not be done.

GOODS BUYING HAS TAKEN OFF



CZECH REPUBLIC

NOTHING TO DO BUT CUT

In a surprise move, the Czech central bank on Oct. 4 trimmed policy rates for the ninth time this year. The cut is aimed at reversing an upward trend in the Czech currency and rescuing the drowning economy.

The quarter-percent cut in the two-week repurchase rate, to 5.75%, brought the total decline in the rate to 3.75 percentage points this year (chart). And as with the previous cuts, the hope is that a drop in rates will curtail the continued strength in the Czech koruna. But thanks to a heavy inflow of foreign direct investment and expectations of privatization of some government assets next year, the currency is holding

at an eight-month high against the euro.

The rate cut was also designed to stimulate the Czech economy, which has been in recession since late 1997. Real gross domestic

product managed to grow 0.3% in the second quarter over the first-quarter level, thanks in large part to gains in consumer spending and government outlays. But the third-quarter data do not look promising. Retail sales fell back sharply in July to

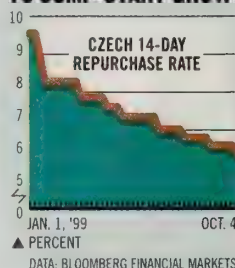
start the quarter, while industrial production remained weak. And unemployment continued to rise last quarter. The jobless rate hit a record high of 9% in August.

One bit of promising news has

been a slower widening in the trade deficit. In August, the trade gap stood at 3.2 billion koruna (\$91 million), far less than July's 7.3 billion. Thanks to renewed vigor in Western Europe, Czech exports rose, led by shipments of cars and consumer goods.

In a September revision to its economic outlook, the government said the unemployment rate would increase further over the next two years, hitting 14% by 2001, as Czech companies reorganize to compete in global markets. The government also forecast that real GDP would fall 0.5% in 1999 and then grow 1.7% in 2000. Prague's forecasts are on par with the projections put out recently by the International Monetary Fund. The IMF is looking for Czech GDP to be flat this year and grow 1.5% in 2000.

ANOTHER RATE CUT TO JUMP-START GROWTH





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THE MAIN EVENT: BERNIE VS. MIKE



Each is bent on dominating telecom in the 21st century. Who will prevail?

TELECOM WAR

Until recently, C. Michael Armstrong narrowly, the telecommunications business "relatively boring." Not anymore. The CEO, a newcomer to telecom when he assumed the top post at the phone giant AT&T in 1997, has done his part to shake up the industry. He has revamped his sprawling company and spent more than \$110 billion to buy cable-TV companies, which he's betting will be the digital multimedia network of the future for home and business.

Bernard J. Ebbers, a onetime basketball coach and media operator, has done his part to enliven telecom, too. Since getting into the phone business by investing in a tiny long-distance reseller in 1983, the MCI WorldCom Inc. CEO has built long-distance empire through a series of astute buys. His latest move, the audacious \$129 billion deal to snap up long-distance player Sprint Corp., will be the largest corporate acquisition ever. To keep Sprint from falling into the hands of BellSouth Corp., a last-minute rival bidder, Ebbers sweetened his offer by close to \$20 billion without blinking.

If the deal goes through, it will leave two nearly equal titans at the top of the phone industry—both headed by strong-willed outsiders. These men, not burdened by memory of that old phone industry—where regulations were strict, growth was slow, and technological change took years—are shaping how communications markets will evolve. Each tends to make his company dominate telecom in the 21st century and is spending hundreds of billions to make it happen.

But the execs are using vastly different strategies. Armstrong, who spent two decades selling computers for IBM and five years as CEO of Hughes Electronics Corp., is leaning

heavily on technology to make

AT&T the winner in the new era of digital communications. He has spent megabucks on cable systems and is plowing billions more to upgrade them to carry digital TV, Internet traffic, and local phone calls. The payoff is far from assured: In early trials, the technology is not proving as reliable as expected (page 40). And on Oct. 1, AT&T

TWO TITANS, TWO GAMBITS

CENTRAL STRATEGY

AT&T Mike Armstrong is betting \$110 billion on cable investment, hoping he can turn the TV wire into a highway running into U.S. homes into calling connections and as a means to offer digital service.

MCI WORLDCOM Bernie Ebbers is betting on wireless, not cable. By investing \$129 billion to buy Sprint, he is trying to buy the leading supplier of long-distance, data, and wireless services to corporate customers.

J. Hindery Jr., the former Tele-Communications Inc. in charge of AT&T's cable strategy, resigned, furthering the picture. Investors, concerned about the huge payments and scant signs of payoff, have dumped AT&T shares, which have dropped 25% since May, to around \$46. Dealmaker Ebbers is taking on more financial than technical risk. But he, too, is betting heavily on new and unproven technology—in his case, wireless—to link his long-distance networks directly to the offices and homes of customers. Only, however, he's putting \$129 billion behind the notion with Sprint, he can put together enough pieces and have enough efficiencies to meet virtually every telecom need that his core business customers will want. In this business, where regulatory and technical barriers are operating, size matters—a lot. In the past two years, there has been a frenzy of dealmaking around the industry to prepare for the day when there is virtually no differentiation between local and long-distance calling or between carrying voice, data, or video. In the

U.S., the number of local-phone companies has shrunk from seven to four as SBC Communications bought Pacific Telesis and Ameritech and Bell Atlantic absorbed Nynex. The new megaregionals are itching to go national once they get into long distance. "It verifies that you need scope and scale," says SBC Communications CEO Edward E. Whitacre. The trend is everywhere. Long-distance upstart Qwest Communications swallowed US West. In Europe, Telecom Italia was gobbled by electronics giant Olivetti after a bidding war with Deutsche Telekom. Phone companies the world over—long regulated and, in many countries, state-owned—are being set loose on a competitive world stage. "We'll see a near whole wave of mergers to come," says Robert C. Fox, a vice-president at Mercer Management Consulting, indicating more global linkups involving companies like Deutsche Telekom or Japan's Nippon Telephone & Telegraph. As this worldwide free-for-all gathers steam, both Armstrong and Ebbers are desperate to move beyond plain old long-distance service. At the end of 1998, MCI WorldCom and Sprint held 34% of the U.S. market between them. AT&T had lost. But cutthroat competition and endless price wars have made long-distance service alone unattractive. Instead, companies like AT&T and WorldCom hope to thrive by offering bundles of services to businesses and consumers. With WorldCom's lead in carrying Internet traffic and its relatively strong

non-U.S. presence, it will be able to sell local, wireless, and even global e-commerce services. "It's a match made in heaven," says Anna-Maria Kovacs, a telecom analyst at Janney Montgomery Scott Securities.

Whether all this will be heavenly for customers remains to be seen. The promise is massive communications capacity available virtually everywhere at ever-lower prices. The reality may be far different. Regulators and consumer advocates were quick to raise concerns about the WorldCom deal. Even Federal Communications Commission Chairman William E. Kennard, who has supported previous telecom megamergers, blasted the deal as a "surrender" in the long-distance price wars. "How can this be good for consumers?" he asks. That's something Ebbers and Armstrong will have to think about to make their massive bets pay off.

*By Andy Reinhardt
in San Mateo, Calif.,
with Catherine Yang
in Washington and
Roger O. Crockett in
Chicago*

LARGEST RISK

Technology for voice service might not be perfect enough for cable companies to pay off before service revenues

WORLD COM Wall Street loves him for his ability to buy companies he has no idea of. But analysts think he paid too much for them. That sentiment could lead to a dive in his lofty price.

MISSING LINK

AT&T It lags far behind in data services. By contrast, MCI WorldCom and Sprint own so much Net "backbone" capacity that they may be forced to divest some of it.

MCI WORLD COM Ebbers has no proven way to reach the residential market. His options for home service—wireless local access and DSL—suffer from limited deployment and are relatively untested.



WHAT IT WILL TAKE TO WIN

WorldCom's hurdles:
The FCC, new technology
—and antsy investors

Can 5¢ Sundays and Nickel Nights add up to more than 7¢ anytime minutes? MCI WorldCom Inc.'s \$129 billion takeover of Sprint Corp. will create a colossus by any standard. But the \$64 billion question about the biggest merger ever attempted remains: Is it enough to unseat AT&T as the No. 1 U.S. telecommunications company? WorldCom will have wireless, international, long-distance, and Internet businesses that, in many cases, meet or surpass those of the leader. And if all goes according to CEO Bernie Ebbers' plan, the new WorldCom may grow fast enough to knock AT&T out of the top slot. "I expect that in five years, WorldCom will be considered the No. 1 long-distance company in the world," predicts Scott C. Cleland, an analyst with the Legg Mason Precursor Group.

**TELECOM
WAR**

Headly stuff. And as Ebbers stormed New York in a series of meetings on Oct. 5 to announce and explain the deal, the prospect of sitting atop a trillion-dollar industry had the 58-year-old entrepreneur walking on air. He strutted, grinning from beneath his trim gray beard, as he worked rooms full of journalists and financial analysts like a show-biz pro.

But Ebbers, who built his empire outside of Jackson, Miss., and kept it there to stay close to his country roots, remained true to form. "I'm not the only cowboy around here anymore," Ebbers quipped, referring to Sprint CEO William Esrey's penchant for ranching, horseback riding, and cowboy boots. "We're both wearing rented shoes today." Also, true to form, he did not miss the opportunity to disparage his rival, AT&T. He branded the long-distance leader the "monopoly cable provider"—a dig at AT&T's fight to keep regulators from forcing "open access" to its cable-modem service.



Now, as the buzz from the dealmaking begins to fade, Ebbers heads back to Mississippi to figure out how to make this megamerger take off. Before he can start incorporating those pieces that Sprint brings to the WorldCom empire, Ebbers must first get past a balky Federal Communications Commission. The size of the deal and the fact that it will create an enormous duopoly in long-distance has FCC Chairman William Kennard vowing to take a close look at the combination. Taking Sprint out of the game, 85% of the U.S. long-distance market will be in the hands of just two companies. The next No. 3, Qwest Communications International Inc., would be left with less than 2% of the market. "You have two players, each 10 times the size of the next guy. And when you add the next 10 together, they're still half the size of these two companies," says Janney Montgomery Securities analyst Ann Maria Kovacs.

TECHNICAL PROBLEMS. Also, while Ebbers has plenty of experience with mergers—there were more than 60 deals before this one—Sprint may present the biggest challenge yet. Integrating the networks and technologies of the two giants will likely take years, and WorldCom's freewheeling culture stands in sharp contrast to that of Sprint, based in Westwood, Kan. Besides, this time out, Ebbers does not enjoy unqualified support on Wall Street. While analysts applaud the strategic vision, they question the steep cost. Investors lopped 9.7% off of MCI WorldCom's share price since word of the proposed deal, including \$14 billion in assumed debt, leaked out. And while Ebbers maintains that the deal will not harm operating earnings, some analysts are cutting estimates, just in case.

Furthermore, Ebbers must solve technical problems that could get in the way of providing high-speed "broadband" com-



**ESREY AND
EBBERTS MAY HAVE
TO DIVEST SOME
INTERNET ASSETS**

ions directly to customers. And he realizes that he will face more competition, possibly more dangerous than AT&T. At least with AT&T he might hope for a form of peaceful coexistence since his company is more focused on business markets, while AT&T is more consumer oriented (table). The greater threat may come from the imminent entry into long distance of the Baby Bells, which have been straining to get into the business for years. Bell Atlantic Corp.'s petition for entry is already at the FCC, and the Sprint deal itself might encourage regulators to let others in soon. At the same time, Ebberts is revving up his efforts to compete with

the Bells in local calling, primarily through new wireless connections. "We're going to be significant competitors to the Bell operating companies," he declares.

Whatever the obstacles, Ebberts has no doubts about his fundamental strategy. It's simple: WorldCom, as the new company will be called, will be geared to providing customers—primarily businesses—with every variety of telecommunications service, from voice to data to Internet access, to wireless and international calling. WorldCom will have distinct advantages in Internet traffic and data communications, as well as operations in 65 countries. And Sprint's wireless division fills a long-standing hole in WorldCom's strategy.

For both WorldCom and AT&T, their current core business—U.S. long-distance—will shrink in importance. While MCI WorldCom's U.S. long-distance revenues are growing at 7% annually, sales of data, Internet, and international services are increasing by 40%. "The juice is out of the lemon in consumer long distance," Ebberts says.

TOE TO TOE. In sheer size, WorldCom would clearly rival AT&T. The company would enjoy revenues of \$54 billion, compared with AT&T's \$62 billion. And the new WorldCom's market capitalization of more than \$200 billion would outstrip AT&T's \$133 billion. Together, MCI WorldCom and Sprint hold 23.5% of the consumer long-distance market—well behind AT&T's 60% share, according to Dataquest. On the other hand, MCI and Sprint together would match AT&T in business long distance. And in wholesale—hawking millions of minutes to resellers—the two control 51%, compared with AT&T's 19%.

From a marketing perspective, the combination gives WorldCom and Sprint the potential to do things that neither could do alone. Now, when WorldCom goes out to sell bundles of telecom services—long distance, Internet access, and wireless—it will stand toe to toe with AT&T, no longer unable to provide crucial bits, such as wireless. Eventually, Ebberts says, the company will sell its customers a bucket of minutes per month to be used however the customer chooses. As the network becomes completely digital and achieves broadband speeds, customers may simply buy capacity for Internet access or local or long distance—or even video. "The long-distance business is not going to be long distance as we know it today," Ebberts says.

One key to that vision is the unsurpassed digital network that the two companies can assemble—a system with enough market share to raise hackles in Washington. The FCC might grant merger approval only after the company sells off

BIGGER 0.2



MCI WORLDCOM

MCI WORLDCOM



	AT&T	MCI WORLDCOM	MCI WORLDCOM Sprint
TOTAL CUSTOMERS	80 million	22 million	42 million
CONSUMER VOICE	\$21.7 billion	\$6.9 billion	\$9.7 billion
BUSINESS VOICE	\$16.4 billion	\$14.1 billion	\$19.7 billion
TOTAL VOICE	\$38 billion	\$20.9 billion	\$34.9 billion**
DATA/INTERNET	\$7.7 billion	\$11.0 billion	\$13.8 billion
WIRELESS	\$6.7 billion	N.A.	\$2.9 billion
INTERNATIONAL	\$1.1 billion	\$1.8 billion	\$1.8 billion
OTHER	\$8.3 billion*	\$378.0 million	\$665 million
TOTAL	\$61.9 billion	\$34.1 billion	\$54.2 billion

1999 ESTIMATES

SOURCE: SANFORD C. BERNSTEIN & CO.

* INCLUDES CABLE BUSINESS ** INCLUDES \$5.6 BILLION FROM LOCAL PHONE SERVICE

TELECOM WAR

some of the Internet backbone capacity. Together the companies control 43% of the U.S. access points to the Internet. The likely sacrificial unit would be Sprint's backbone business. "One of the Internet backbones will have to be divested," says ABN AMRO analyst Kevin Roe.

Without question, the most important addition to WorldCom's portfolio will be Sprint's PCS unit. "The gem they're looking at is the wireless property," says Roger Wery, head of the communications practice at telecom consultancy Renaissance Worldwide Inc. Ebbers flirted with a bid for Vodafone Airtouch PLC last year and negotiated with Nextel Communications Inc. last spring but finally balked at the financial terms of the deal. Although relatively small, Sprint PCS could prove to be a better deal than either. The carrier serves all of the top 50 markets as well as hundreds of smaller towns, and its data-transfer capabilities are currently second to none among wireless carriers—a key point for data-mad WorldCom.

DIRECT LINKS. And Sprint PCS is doing well. Its subscriber base has been growing furiously, with 2 million new customers this year alone. Also since it is represented by a tracking stock, the red ink the carrier has accumulated while building out its network is isolated from Sprint's balance sheet. To keep those same debts from diluting the earnings of the new company, Ebbers plans to exchange Sprint's PCS tracking stock—shares that entitle holders to the profits of high-growth divisions of companies but have restricted voting rights—for his own WorldCom PCS tracker.

But, Ebbers insists, the deal isn't just about wireless. He's also filling another gap: direct access to millions of customers—a business long controlled by the regional Bell operating companies. AT&T has made its bet on delivering voice, data, and video over cable, spending \$110 billion to turn itself into the biggest U.S. cable operator. Sprint and MCI WorldCom have pinned their hopes on two technologies. The first is Digital Subscriber Line, high-speed connections that the company leases from local phone companies. But it's betting more on an emerging wireless technology that could, as AT&T is attempting with cable, give WorldCom its own direct links to customers. The largely untested broadband technology is called MMDS (for Multichannel Multipoint Distribution Service). AT&T is experimenting with similar technology.

Between them, WorldCom and Sprint have MMDS licenses for areas that include 60% of U.S. households. While MCI is

downplaying residential long distance, it sees high-speed wireless connection as a way to get into more lucrative consumer market. "This gives us capability to get back in the home with an integrated service for broadband," says MCI WorldCom V Chairman John W. Sidgmore. Analysts, though, are skeptical. "The [Baby Bells] kicked that around a year ago and then it out," says Yankee Group analyst Brian Adamik. Meanwhile, WorldCom does get some direct connections via Sprint deal. The company, which traces its roots back to a local carrier called Brown Telephone Co., has 5 million local customers.

Sprint's ION service also provides potential for high-speed connections—once it works as planned. It's designed to let customers make phone calls, send faxes, cruise the Internet

and receive video signals—without having to order multiple lines. But the service has been fraught with problems, and product delays from hardware suppliers have forced Sprint to operate with older, less capable equipment. "ION is a joke," says one analyst. Brad Hokeney, Sprint's assistant vice president for product development, counters that ION "is revolutionary, and when you do revolutionary things, there's not going to be overnight implementation."

Finally, Ebbers will have to untangle Sprint's dangling alliance with France Télécom and Deutsche Telekom, called Global One. "The ownership structure of Global One can go forward," says Esrey. He predicts that the alliance will break up sometime in the next couple of months. MCI has its own subsidiaries in France, Britain, and Germany and an alliance with Spanish network operator Telefónica.

Then there are the financial risks to the megadeal. At \$115 billion in stock, MCI WorldCom is paying a premium of 50% over the market value of Sprint and Sprint PCS in the weeks preceding the merger. Although he kicked in an extra \$20 billion or so to beat a counter-offer by BellSouth Corp., Ebbers says the deal is sound: He expects to see \$9.7 billion in operating synergies—including consolidations—and a \$5.2 billion savings in capital expenditures for the combined company between 2001 and 2004. Some analysts, though, question the math. Vincent Grover at Kaufman Brothers LP, a New York-based investment bank, says the return on that investment will be "less than you would make on a municipal bond."

Muni bonds and Bernie Ebbers? Not likely. If his massive bet on Sprint and new technology pays off, he'll have a whole lot more than 5¢ Sundays and Nickel Nights to go his big payoff.

By David Rocks in New York, with Roger O. Crockett in Chicago, Catherine Yang in Washington, and Peter Coy in New York

BERNIE'S CHALLENGES

REGULATORY The FCC vows to take a close look at the proposed Sprint takeover. In particular, the agency worries about concentration in long distance and in the Internet backbone.

TECHNOLOGICAL The merged company is building its local strategy around largely untested wireless systems. The company maintains that the systems are reliable and cost effective. But so far analysts aren't convinced.

FINANCIAL Ebbers is paying a whopping 50% premium over what Sprint's market value was before deal speculation began in late September. It will take enormous synergies—and cost-savings—to justify such a rich price.

CULTURAL Swallowing Sprint just one year after closing the MCI merger could create a management nightmare. One plus: Sprint's CEO, Bill Esrey, stays on as chairman of the combined companies and is likely to take a more activist role than current chairman, Bert Roberts—former chief at MCI—has played.





Business Intelligence Specialist

Name: John Hoh

Job Description: Work with companies to identify product sales patterns and use that data as a tool to improve business.

Experience: Designed a point-of-sale data warehouse for Panasonic, helping them analyze buying patterns in order to reduce back orders and excess inventory.

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PLENTY OF SNAGS LATELY

OCT. 20, 1997

C. Michael Armstrong
is named chairman
and CEO

JAN. 8, 1998

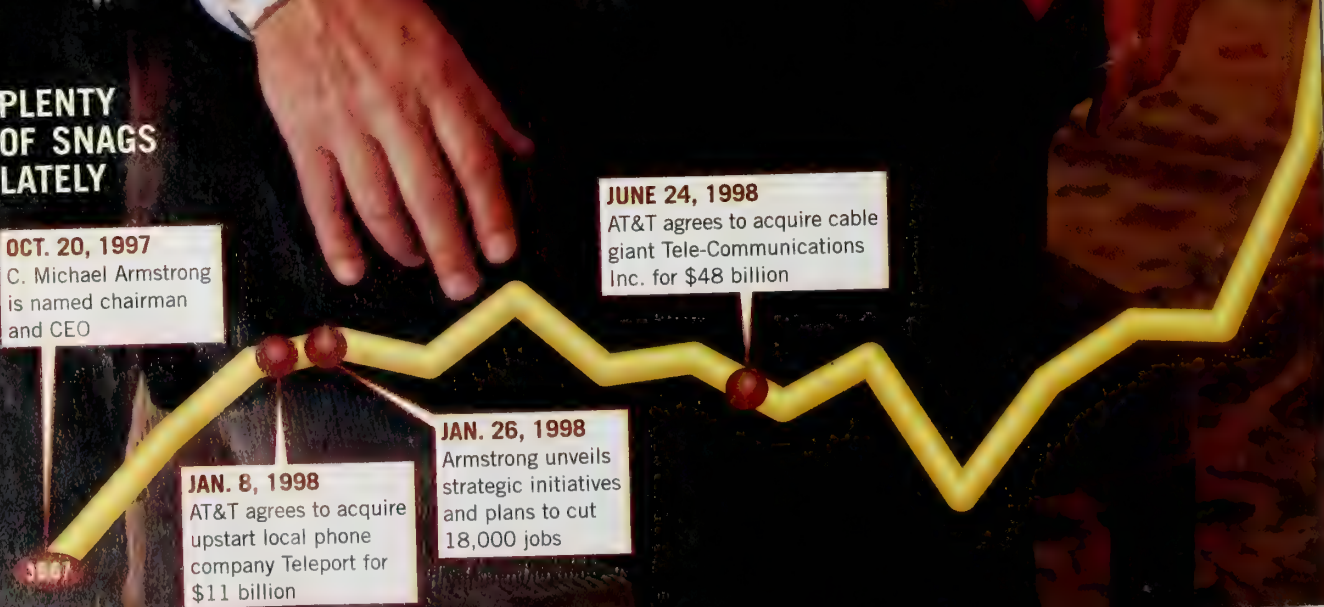
AT&T agrees to acquire upstart local phone company Teleport for \$11 billion

JAN. 26, 1998

Armstrong unveils strategic initiatives and plans to cut 18,000 jobs

JUNE 24, 1998

AT&T agrees to acquire cable giant Tele-Communications Inc. for \$48 billion



AT&T: THE PROBLEMS KEEP ON COMING

Can an Armstrong manage his way around enormous pitfalls?

Lisa Daskarolis signed up for local telephone service from AT&T in mid-August, and she's not happy. "Can you hear that?" the 39-year-old math teacher asks as a loud hum interrupts a phone interview. She is using AT&T service that runs over a cable-TV network, technology that is essential to the future of the company. If this is the future, it has left Daskarolis wanting. She can't use her cordless phone in all the places she likes to. "I can't go into the garage. I can't sit outside on any day," she says. And she can't get over how her first month's billing got messed up when AT&T charged her and she owed \$53. After she complained, the company fixed its mistake, but it left her irked. "That's the kind of stuff that makes life frustrating," she says. It's also the kind of stuff that AT&T can't afford to do now. When C. Michael Armstrong arrived as CEO two years ago, he could do no wrong. He lifted the moribund giant out of years of stagnation and charged ahead with a strategy to move AT&T into fast-growth markets. But something has gone awry. The company's long-distance business is crumbling faster than expected, and Armstrong's bet that cable is the way out is hitting snags. As if that weren't enough, competition just got a whole lot scarier: On Oct. 5, MCI

WorldCom Inc. announced a \$129 billion deal to acquire Sprint Corp., creating a powerhouse that nearly matches AT&T in long distance—while being far mightier in Internet services. "This merger allows us to compete head-on with AT&T," crows John Sidgmore, WorldCom's vice-chairman.

Indeed, the potent WorldCom-Sprint combo only brings AT&T's high-wire strategy into stark relief. Now WorldCom CEO Bernard J. Ebbers is packing a holster full of weapons to attack the industry leader—wireless, Net, long distance, international, and even local services. And Ebbers, a pragmatic former motel manager, will be using tried-and-true technology instead of the unproven cable-TV networks that the bold Armstrong is betting on. Armstrong has ponied up \$110 billion to acquire two cable companies and will have to spend an additional \$7 billion spiffing up the networks—mega-money that has Wall Street in a stew that AT&T will never see a payoff.

Making matters worse, just when Armstrong could use seasoned hands at his side, he's wrestling with turmoil in his top ranks. The latest development: On Oct. 6, Leo Hindery Jr., the respected cable-industry veteran who was overseeing AT&T's push into cable telephony and Internet services, stepped down. That's the sixth top exec to depart in the past 21 months. Even John D. Zeglis, a brainy lawyer who has taken on the critical operational role of president, considered another job recently.

DEFENSIVE. AT&T stock, which had been on a tear since Armstrong's arrival, is in a swoon. Shares have tumbled 27% from their high in January, to 46%, slashing AT&T's market capitalization by about \$55 billion, to \$149 billion. Over the same period, the Standard & Poor's 500-stock index is up 6%, and WorldCom's stock has slipped a modest 9%.

Suddenly, the seemingly indomitable Armstrong is on the defensive. Some have begun to question whether he will pull off his radical plan for transforming AT&T. After arriving from defense contractor Hughes Electronics Corp., the tough-talking, Harley-riding CEO quickly laid out a road map for making his new company less reliant on the long-distance business. His goal: to broaden AT&T into a communications behemoth, offering everything from speedy Net connections and telecom consulting to wireless and local phone service—to anyone, anywhere, by any means. It is a transformation on the scale of General Electric Co.'s makeover—from an appliance maker into a powerhouse in businesses as diverse as finance, entertainment, and jet engines.

Armstrong's task is no less onerous. He has broken from the pack by entering the \$100 billion local telephone market through phone service over cable-TV pipes. The only problem is that cable systems are notoriously unreliable. That means

TELECOM WAR

AUG. 6, 1999

AT&T outbids Comcast to buy cable player MediaOne Group for \$62 billion

OCT. 5, 1999

MCI WorldCom agrees to acquire Sprint for \$129 billion

SEPT. 1, 1999

Broward County votes to force AT&T to let other companies use its network to provide Internet access

AUG. 30, 1999

After aggressive price cuts by MCI WorldCom and Sprint, AT&T introduces 7¢-a-minute long-distance plan

OCT. 6, 1999

Leo Hindery, chief of AT&T's cable operations, resigns

he must make the cable networks as rock-solid as phone systems that have been fine-tuned for more than a century. While cable telephony has worked in the labs, the challenge of broad usage has defeated some of the country's best engineers. The conundrum: Cable phones operate on a network that customers share with their neighbors—so interference from the guy down the block can wreak havoc on phone quality. "I battled this for 10 years and threw in the towel," says Ralph Ungermann, who began working on cable telephony in the mid-1980s at Ungermann-Bass. "I think there are real serious technical problems."

"EXECUTION." Hogwash, says Armstrong. He characterizes concerns over AT&T's strategy as misplaced and overblown. Sure, a price war is battering his long-distance business, but he points out that the company is cutting costs so aggressively that it will continue to generate the cash that's essential to fund new businesses. And he is as committed as ever to cable. He believes that phone calls over fat pipes will become a formidable competitor to the existing phone networks as AT&T works out the kinks over the next year. "You know how in real estate the mantra is: location, location, location," he says. "Ours is: execution, execution, execution. We have the game plan and we have the technology. Now we have to make them work."

But can he? It will take near-flawless management to avoid the enormous pitfalls on every side. The long-distance business looks like a disaster in the making. And a massive rollout of cable telephony will be so complicated that it could

very well take longer—and cost far more—than expected. Here's what makes the task so tough. With Armstrong spending \$110 billion in stock on two cable companies, earnings in the next few years will be watered down—because they're sprinkled across more shares. To boost income enough to make the deals contribute to earnings by 2004, Armstrong will need 7.6 million cable telephony customers paying

only \$800 a year, or \$66 a month, and 5.6 million Net access subscribers paying \$36 a year, or \$28 a month. Those are ambitious goals, considering the company's customer base now number a mere 3,000 for cable telephony and fewer than 1 million for Net access. Given the technology, marketing, and management risks, many investors are skeptical that Armstrong can hit such high targets. "I think he's screwed," says Sanford Riccio, managing director at GEM Management, a money manager that invests in telecom stocks but does not hold AT&T.

If Armstrong can prove the skeptics wrong, though, the payoff will be enormous. He's banking that revenues from the new operations will grow an average of 24% annually for the next five years, to \$21.6 billion

in 2004. That will more than make up for the slowdown in long-distance business. Along with the vibrant wireless consulting operations, cable would push AT&T's revenues more than 10% per year, to nearly \$100 billion in 2004.

Already, Armstrong is making progress. Thanks to innovative marketing and pricing plans, AT&T Wireless Service is soaring. One big reason AT&T still expects to hit Wall Street

TELECOM WAR

If the company can prove the skeptics wrong, the payoff will be gigantic

AT&T'S SIX CHALLENGES

Armstrong must overcome hurdles to transform the company from a long-distance player into a communications Goliath.

LONG DISTANCE



AT&T is troubled, and it's going to get worse. Because of a price war with Sprint and MCI World-

Com, AT&T's consumer long distance is projected to shrink about 5% this year, to \$22 billion. The decline could accelerate when Bell Atlantic and other Baby Bells enter the market. AT&T's long distance for businesses is growing 6% this year, to \$24 billion, although that's likely to slow in the future. Such pressures prompted AT&T to announce plans for \$2 billion in cuts.

How it'll stack up*



WIRELESS



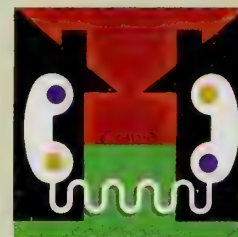
This business is red-hot, thanks in large part to AT&T's Digital One Rate, which includes roam-

ing and long distance for a flat fee of 11¢ to 15¢ a minute. The wireless business is projected to surge about 40%, to \$7.6 billion, this year. Still, Sprint is adding more subscribers, and it's marketing wireless Web browsing that AT&T can't match. And the wireless joint venture between Bell Atlantic and Vodafone unveiled in September creates a major third competitor with national reach.

How it'll stack up



LOCAL PHONE SERVICE



This remains a work in progress. AT&T has high hopes of selling local phone service over its cable

TV network, but there have been quality problems in its Fremont (Calif.) test market. AT&T has also announced a deal with Time Warner to offer cable telephony starting in February, but the two have yet to agree to final terms. Still, AT&T says it is on track to be in nine test markets with cable telephony by early 2000. It is selling service commercially in Fremont and Chicago.

How it'll stack up



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forecasts for this year is that the company figures wireless revenues will rise 40%, to \$7.6 billion. AT&T Solutions, its consulting and outsourcing business, is expected to jump nearly 50%, to \$1.6 billion. And the broadband Internet access service Excite@Home, in which AT&T holds a majority voting stake, boosted its number of customers 35%, to 620,000, between the first and second quarters.

Armstrong will need every bit of that to make up for troubles in the long-distance business, where AT&T still gets 72% of its revenues. Rivals MCI WorldCom and Sprint Corp. unveiled aggressive new price cuts this summer that forced AT&T to respond with its own 7¢-a-minute offer. The result: Revenues in the consumer long-distance market will decline as much as 5% this year, concedes Armstrong. At the same time, he says, growth in business long distance will slow to 7% or less, compared with the 9% that analysts were expecting. All told, AT&T's long-distance revenues will be roughly flat, at about \$46 billion, vs. the \$48 billion analysts originally predicted.

MAVERICK. And with Baby Bells such as Bell Atlantic Corp. preparing to enter the market, it's bound to get worse. That's especially true in the consumer long-distance market, where AT&T's revenues are expected to drop 8%, to \$19.8 billion, in 2000, according to analyst Tod A. Jacobs of Sanford C. Bernstein & Co. "Wall Street is right to be worried," says Mark Bruneau, president of the business-strategy group at Renaissance Worldwide.

It doesn't help that AT&T is struggling with cultural clashes. Already, the mixture of the tradition-bound phone company, two maverick cable players, and a relatively new chief executive is showing signs of strain. There were tensions between Armstrong and Hindery before Hindery's abrupt

departure, insiders say. Hindery lost much of the independence he had at TCI, while Armstrong felt Hindery was committed enough to meeting his financial goals. That foreshadowed even more conflicts between the buttoned-up CEO and the rough-and-tumble cable execs.

And Armstrong may soon lose another key man: Zeglis, who was a serious candidate for the CEO post at

when Armstrong was named, has suffered recent setbacks. When Hindery argued he should report directly to Armstrong, instead of to Zeglis, Armstrong agreed. Zeglis has no responsibility for the cable negotiations. And Zeglis didn't play much of a role in the MediaOne acquisition. He took over with taking the top post at Compaq Computer Corp. before pulling himself out of running earlier this year, and headhunting says he's willing to consider other jobs. Zeglis says only, "I'm doing thrilling things. I'm not out looking."

Executive turnover has prompted a number of questions about Armstrong's leadership style. While the company used to have a legal culture, Armstrong is demanding gruff. "Nobody ever got dressed down

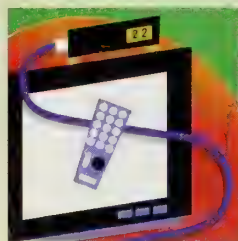
before, but Mike has done that several times," says one former executive. He's particularly tough on execs who don't deliver revenues and expense targets. "If you're not on your number, there's a lot of fear and trepidation when you go to see him," says Tom Byrnes, a former AT&T manager.

At times, that has bruised egos and damaged morale. Some execs feel he has been dismissive of longtime AT&T managers and what they have accomplished in the past. "That has convinced some people to think about leaving," says a top manager who recently departed. Indeed, a survey

TELECOM WAR

"Wall Street is right to be worried," says a telecom consultant

CABLE TELEVISION



Armstrong pulled off a coup by cutting a deal to buy MediaOne Group after Comcast appeared to have

the company locked up. But he faces hurdles in getting the \$62 billion deal closed. The FCC is concerned that AT&T could have too much of the U.S. cable market, and it may force the company to sell some cable properties, including perhaps MediaOne's stake in Time-Warner's cable business. If the deal closes, it will make AT&T the largest cable company in the country.

How it'll stack up



INTERNATIONAL



After a previous international partnership floundered, AT&T created a joint venture with British Tele-

communications last year to deliver services to multinational corporations. The venture has strong prospects. Both sides are chipping in assets that will generate a combined \$10 billion in revenues, and they hired former Pacific Bell exec David Doran to run the venture. If all goes well, this could well lead to an eventual merger between the two telecom giants.

How it'll stack up



BROADBAND



The cable-TV network has tremendous potential to deliver zippy Internet connections to U.S. homes.

Excite@Home, in which AT&T has a majority voting stake, increased its cable-modem subscribers by 35% in the second quarter, to 620,000 people. But a strategic dispute is clouding relations between the two companies. Excite@Home is moving into content, while AT&T would prefer to sell Net connections without content. That way, it could market Net access with Excite rivals.

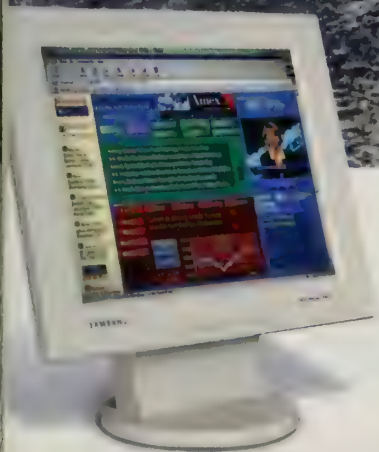
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AT&T employees conducted in January and February showed that job satisfaction decreased the closer execs were to the top—the opposite of what personnel experts tend to find.

There are those, however, who say Armstrong's tactics are exactly what AT&T needs. "The culture is definitely changing, and some people who are lifers may not like that. But I think it's for the good," says Joel Gross, a former AT&T exec who is now chief financial officer of telecom startup Broadview Networks. Armstrong sets quantitative goals throughout the organization. Salespeople in the business-services unit must now meet revenue targets that range from \$5,000 to \$20,000 per month. "Yes, he's relentless," says Zeglis. "I think in our situation I would accept nothing less than a leader who is as demanding as Mike Armstrong. We have a lot to do."

For starters, AT&T is facing a regulatory battle over its proposed \$62 billion acquisition of cable player MediaOne. Along with the acquisition of TCI that closed in March, the MediaOne deal could put AT&T over the Federal Communications

analysts agree. But regulatory experts are less cer-

That's only the start of the problems with Excite@Home. There are simmering tensions between Excite and AT&T. Excite CEO Thomas Jermoluk wants to dish up content such as news stories and chat services along with Net access. AT&T, on the other hand, doesn't want Excite in the content business. "It can market Net access with any content a customer wants, be it from AOL or Yahoo! Inc. 'It will be a less valuable position for us to saddle up to a particular content provider,'" says John C. Petrillo, company's strategy chief.

The most critical challenge for AT&T, though, is rolling out broadband telephony. In the Fremont trials, the experiences of customers such as Daskarolis suggest there's work ahead. Even glitches with the Excite@Home service are beginning to reemerge on AT&T's phone service. Fremont resident Bruce J. Brown says the reliability of Net access is so spotty that he turned down an offer to be part of the phone-over-cable trial and received \$150 a month. "God, no, I'd never touch that," he says. "As

TELECOM WAR

TURMOIL AT THE TOP

AT&T has lost several executives since CEO Mike Armstrong arrived at the company two years ago—and more could go

JEFFREY WEITZEN



The former head of AT&T's business unit left in Janu-

ary, 1998, to become COO of PC maker Gateway, lured by a \$1.4 million signing bonus and an options package worth \$21 million, according to Gateway's most recent proxy.

GAIL McGOVERN



After Armstrong became CEO and Zeglis took the

president post, McGovern, president of the consumer-services division, had no room to rise within AT&T. She left in August, 1998, to become an executive at Fidelity Investments.

ROBERT ANNUNZIATA



Annunziata came to AT&T as part of its acquisition of upstart

Teleport, and was promoted to head up the business segment of AT&T. But he left in February to become CEO of hot telecom startup Global Crossing.

DANIEL SCHULMAN



The former head of AT&T's WorldNet Internet access

business and, briefly, its consumer-services unit joined Internet startup priceline.com in June. He received a \$300,000 salary and options on 3 million shares that now are underwater.

LEO HINDERY JR.



The well-respected former president of Tele-

Communications came to AT&T as part of the company's acquisition of TCI in March. He ran the critical cable-television and cable-telephony operations until he resigned on Oct. 6.

Commission's limits on cable ownership, depending on how the FCC votes to revise its rules for cable ownership on Oct. 8. AT&T argues that it shouldn't have to dispose of any properties, but regulatory analysts say there's a chance AT&T may have to sell the 25% of Time Warner Entertainment that MediaOne owns or other assets. "It's not a matter of if they're going to sell, it's a matter of how much they're going to sell," says analyst Scott C. Cleland of Legg Mason's Precursor Group.

CLOUDED. Just as crucial is how regulators affect AT&T's push into the business of selling broadband Net access. Through Excite@Home, the company is offering Net connections that are 20 times faster than today's traditional cable modems. But AT&T could get tripped up: Several cities say that because cable is a monopoly service, the company should have to let competitors such as America Online Inc. sell Internet access on its network. Portland (Ore.) officials plan to force AT&T to share its cable network, and earlier this year the city won a U.S. District Court ruling against AT&T upholding the decision.

Uncertainty will cloud the issue for several more months. The Ninth Circuit Appellate Court, which will decide an appeal of the Portland decision early next year. AT&T is confident that it will prevail, and most Wall Street

as I can tell, their infrastructure can't support reliable Internet service. Why would it provide reliable phone service?"

AT&T says cable technology is going to work just fine. It's operating in five test markets and is being sold commercially in Fremont and Chicago. The company plans to limit commercial and test users to 3,000 until the end of the year so that it can carefully work out any problems. "We're learning a lot about this business," says Curt Hockemeier, who is overseeing the effort. "In a word, the trials are going great."

So where does all this leave AT&T? The company's future may well be determined in the next year. If WorldCom gets approval to buy Sprint, the company will face a strong competitor. How much of MediaOne it gets to acquire will affect the breadth of its reach in the U.S. And if AT&T can't get cable telephony to work on a massive scale at a reasonable cost, it will be in serious trouble. In the meantime, Armstrong's plans for a grand transformation hangs in the balance.

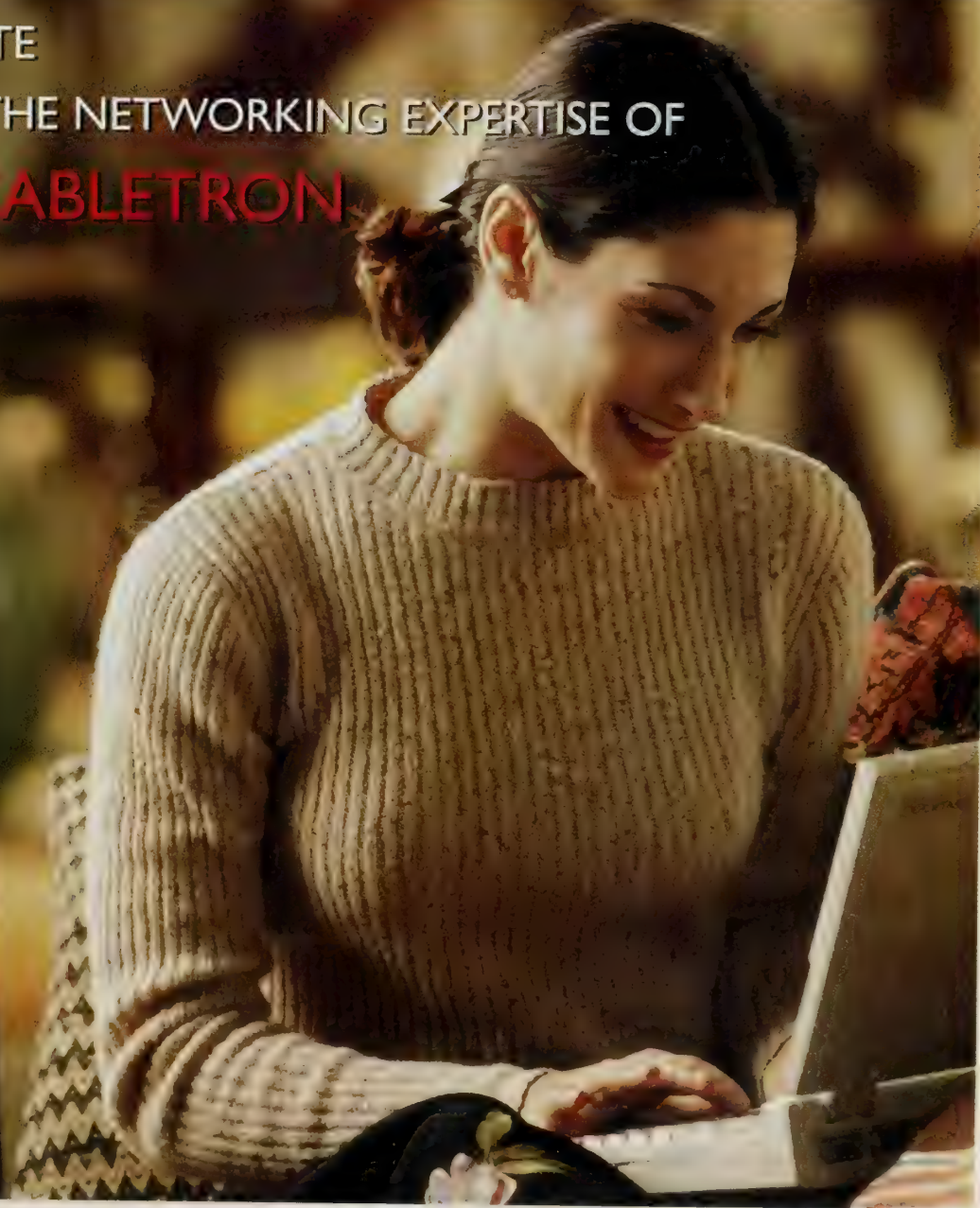
By Peter Elstrom in New York

BusinessWeek ONLINE

For an examination of AT&T's test of phone-via-cable service, see the Oct. 17 issue online at www.business.com.

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COMMENTARY

By Michael J. Mandel

ALL THESE MERGERS ARE GREAT, BUT ...

The \$129 billion merger of MCIWorldCom Inc. and Sprint Corp. may be garnering the headlines, but it is only the tip of the biggest merger wave in history. On the day before the two companies announced that megadeal, the largest U.S. radio station company, AMFM Inc., made public its \$23 billion acquisition by the third-largest, Clear Channel Communications Inc. (page 56).

And the merger frenzy is not restricted to technology, media, communications, and other New Economy industries. On Oct. 6, Phelps Dodge Corp. agreed to buy Asarco Inc. less than a week after completing negotiations to acquire Cyprus Amax Minerals. The result: The largest copper producer in the world. Globally, more than \$2 trillion worth of mergers and acquisitions were announced in the first three quarters of 1999, according to Securities Data Co.

GROWING CONCENTRATION. Given this mind-boggling volume, it's time for antitrust regulators to take a broader look at what the megamerger boom is doing to the economy. Nobody is calling for a return to the era of out-of-control trustbusting. But there is a growing sense among some economists and antitrust lawyers that the concentration of market power in the hands of a relatively small number of big companies may be going too far. "Antitrust policy has taken itself out of the ballgame," says Albert Foer, president of the American Antitrust Institute, a think tank founded in 1998. "The regulators are doing a reasonably good job at near-term microanalysis, but they are not giving adequate attention to long-term implications."

Since the early 1980s, the dominant view among economists has been that regulators should avoid second-guessing corporate decisions unless there is clear evidence that a merger will cre-

ate significant pricing power. "Especially when the merging companies are not direct rivals, the presumption should be that it is O.K.," says Jonathan B. Baker, a law professor at American University and the former chief economist at the Federal Trade Commission. When regulators have problems with a deal, the preferred solution is not to block the union but to force merging companies to sell off overlapping parts of their businesses.

But taking a case-by-case ap-

**Approving a big deal
can trigger more
combinations in the
same industry**

proach to mergers means that regulators lose sight of the bigger picture. For one, they do not sufficiently weigh the possibility that a particular deal, even if it looks O.K. by itself, may trigger a merger spree among other companies in the same industry. The Clear Channel-AMFM merger, for example, is in many ways an effort to avoid being crushed by the combined CBS Corp.-Viacom Inc. media empire.

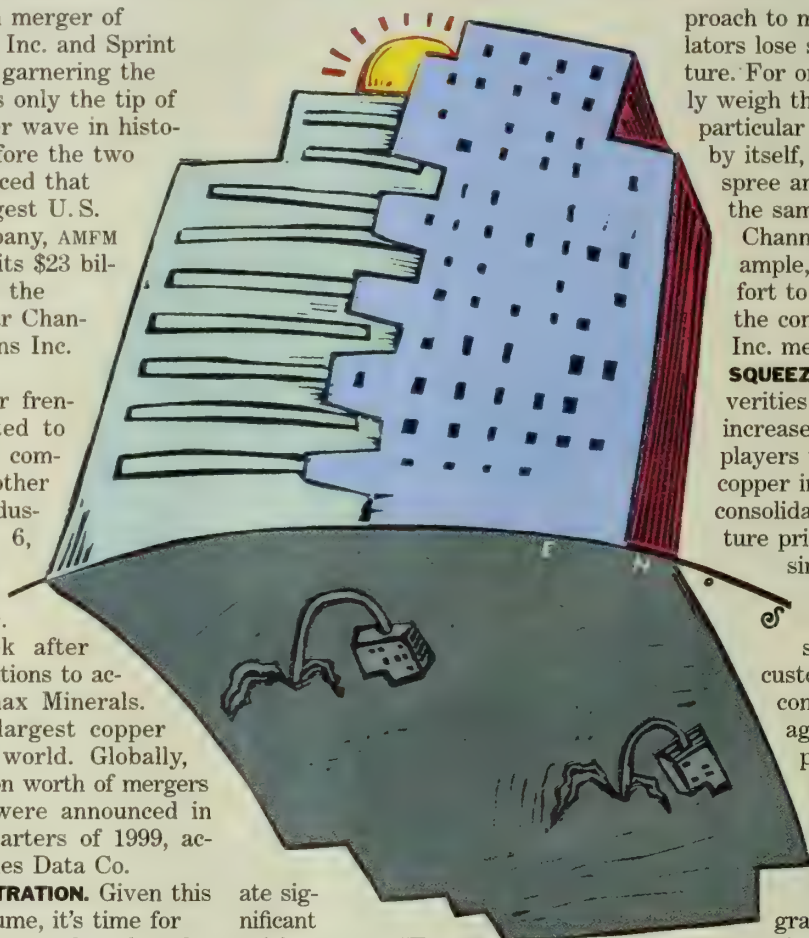
SQUEEZE PLAY. The old market verities apply: As concentration increases, it's easier for remaining players to raise prices. In the copper industry, the prospect of consolidation helped drive up future prices by more than 20% since the middle of June.

Dominant players can potentially squeeze their suppliers as well as their customers. In farming, the continued concentration of agribusiness is putting pressure on independent farmers. This trend should only continue in the aftermath of Cargill Inc.'s July acquisition of Continental Grain Co.'s grain business, giving Cargill almost one-third of the U.S.

grain export market. The merger boom affects far more than pricing. The absorption of smaller, less bureaucratic companies into larger, more rigid ones can potentially choke off innovation. Moreover, as the companies at the top of the pyramid get bigger and bigger, they also wield more and more clout. "Political power goes hand-in-hand with economic power," says Foer. Such a concentration of power may not be healthy for the democratic process.

Certainly, at this point there is still relatively little public outcry against the perils of bigness, even when behemoths such as Sprint and MCIWorldcom merge. Nevertheless, a closer, more critical examination of such deals can only leave the U.S. economy healthier in the end.

Mandel is economics editor



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TRADE

FUROR OVER 'FRANKENFOOD'

Fear of gene-altered crops is now a real threat to U.S. exports worth billions

Dave Boettger is ready to harvest 280 acres of corn growing on his Harlan (Iowa) farm. But a proposed sales contract from Archer Daniels Midland Co. has left him wondering if he can afford to. ADM is offering 8¢ a bushel more for the old-fashioned corn Boettger grows than for the gene-spliced corn that now accounts for one-half of his acreage. But if testing reveals even a tiny amount of altered genes anywhere in his grain, he would have to pay ADM for the cost of dumping the entire load. "Pollen from my other fields could contaminate the load, so there's no way that I can warrant that the shipment is 100% non-genetically modified corn," he says. "I can't work under this contract."

It wasn't supposed to be this way. Genetically modified (GM) crops were sold to farmers as an agricultural revolution: The new corn, soybeans, potatoes, oilseeds, and cotton promised to fight pests, boost yields, and cut chemical use. Farmers such as Boettger gladly signed up and have devoted much of their planting to gene-altered crops.

Now, they find that the fierce backlash in Europe against what British tabloids gleefully refer to as "Frankenfood" is cutting off billions of dollars in export sales. And even as a trade war over the issue escalates, food processors—while insisting that the high-tech versions are safe—are switching back to buying conventional foods. Analysts compare the high-tech food industry to the once-promising U.S. nuclear-power industry. Monsanto Co. and DuPont, says John M. McMillin at Prudential Securities Inc., "are hoping

it's all a bad dream and it goes away in a couple of years."

The backpedaling not only hurts farmers, it also undercuts the Clinton Administration's battle against protectionism. In retaliation, U.S. officials hint that they could demand equally impossible levels of safety assurances for French wines and unpasteurized cheeses. And Clinton aides promise that the issue will be a major focus of the 134-nation World Trade Organization meeting this Nov. 30 in Seattle.

GOOD EXCUSE? As the world leader in biotechnology, the U.S. is the most vulnerable to bans on the new food strains. That point has not been lost on European and Japanese farmers, who have supported the consumer boycotts. "European agricultural policy is a failure, and this is just a great way for European politicians to change the subject," fumes Commerce Under Secretary David L. Aaron, who was in Brussels on Sept. 17 to negotiate GM food issues.

The Clinton Administration's chief agriculture negotiator, Ambassador Peter L. Scher, warns that the U.S. could strike back by targeting the French practice of using animal blood to draw solids from its red wines. "Allowing public sensitivities to decide these highly technical issues is a very dangerous slope," Scher says. With a push from their farm lobbies, the EU and Japan are developing rules for mandatory labeling of GM foods. But U.S. officials are opposed, fearing that will be tantamount to placing a skull-and-crossbones on the package. Indeed, some European supermarket chains promise to exclude GM foods as soon as they're identified.

The stakes are enormous. Overseas shipments of U.S. crops came to \$46 billion last year, giving the U.S. a \$5 billion trade surplus in farm goods. Meanwhile, half of American soybeans and a third of U.S. corn is genetically altered. Almost 60% of all processed



RESISTANCE BUILDS ACROSS THE GLOBE

FEBRUARY, 1999 European Parliament calls for labeling of gene-altered foods.

MARCH, 1999 Major European supermarkets announce intent to ban GM foods.

APRIL, 1999 Nestlé UK and Unilever UK promise to end the use of GM ingredients in their foods.

MAY, 1999 The European Union

foods in the U.S.—and virtually all the candy, syrup, salad dressing, and chocolate—already contain GM material.

Gene-splicing leader Monsanto has hoped to reap \$881 million by 2003 in licensing fees for its high-tech seeds. Now, that target looks unreachable. O



corn at the company's headquarters, the company brought in a herd of obliging cows to eat it. "The important thing is to take the concerns of the consumer seriously but not to get entangled in a fight that is irrational and cannot be won," says Novartis CEO Daniel L. Vasella.

Vasella argues that GM food is safe, and scientists generally agree. The U.S. Food & Drug Administration has ruled that the new strains don't need special labeling since they aren't significantly different from hybrids developed by cross-breeding. The World Health Organization also has approved GM food.

TOFU, TOO. But science is no match for public opinion in Europe, where debates such as Britain's mad cow disease and other food-contamination problems have eroded confidence in government regulators. Now, the bio-food phobia is catching on in Japan. Brewers have sworn off GM corn, and the government is mandating labeling for 28 different products containing GM food. Japanese tofu makers, responding to public sentiment, are switching to non-GM soybeans, jeopardizing some 500,000 tons of imports, most of them from the U.S.

Politicians feel they must take food fears seriously, even if they're unfounded. "I'm alarmed by groups such as Greenpeace, but polls show they have the support of 80% of the public when they destroy GM crops," says James Elles, a member of the European Parliament. "We don't have an FDA, and we have an extremely sensitive public."

To move the debate onto firmer scientific ground, Romano Prodi, the EU's new president, has proposed an EU equivalent of the FDA. An EU agency might restore the government's credibility on food-safety issues—and U.S. companies welcome the idea. "The Luddites have taken over the debate, but we made some mistakes in not anticipating the controversy or appreciating the cultural differences," says Frank Farfone, vice-president for international affairs at Dow Chemical Co. That comes too late to help Larry Sterk, manager of StateLine Cooperative, a grain-storage company in Burt, Iowa. He's sitting on 12 million bushels from 2,500 farmers—with GM corn and non-GM corn mixed—and needs answers now. "Our hands are tied because of the uncertainty of what's going to happen next," he frets. The farmers "don't know what they are going to do." This is one food fight that will only get worse.

By Paul Magnusson in Washington, with Ann Therese Palmer in Chicago, Kerry Capell in London, and bureau reports

the approval process for all crops.

1999 Britain's Prince Charles GM foods unfit.

1999 Gerber and Heinz e that they will not include ly engineered corn or soybeans by foods.

1999 Consolidated Grain & ys farmers must segregate GM m non-GM crops. Japanese

beermakers Kirin and Sapporo announce that they will stop using genetically engineered corn by 2001. Japan's Agriculture Ministry calls for mandatory labeling of GM foods.

SEPTEMBER, 1999 French President Jacques Chirac says France will oppose trade in GM foods at the next World Trade Organization meeting in Seattle. Archer Daniels Midland tells farmers and grain merchants to segregate GM crops.

4, Monsanto announced that it is pending plans to market "termina- seeds, which are bioengineered to sterile, compelling farmers to buy 7 seeds yearly. Critics had charged such seeds would hand their dep- ers too much leverage over farm-

ers, especially those in poorer countries.

Not even European companies are exempt from the Frankenfood scaremongering. Switzerland's Novartis has inserted genes to make corn disease- and parasite-resistant. When Greenpeace International dumped a huge load of GM

MONETARY POLICY

THE FED'S FOGGY 'TRANSPARENCY'

The market still can't easily divine its leanings

When the Federal Reserve trumpeted its new policy of "transparency" last February, the idea was to communicate more quickly and clearly. No longer would the markets have to wait six weeks to find out which way the Fed was leaning on interest rates. Instead, the Fed would immediately reveal significant shifts in its "bias" toward future rate changes.

But it was hard to see much clarity in the reaction to the Oct. 5 Federal Open Market Committee meeting. The Fed announced that it wasn't hiking rates, but that it was adopting a "tightening" bias. The initial reaction: A rate hike at the next Fed meeting on Nov. 16 is all but certain. Immediately after the 2:15 p.m. announcement, the Dow Jones industrial average sank 232 points below its high of the day.

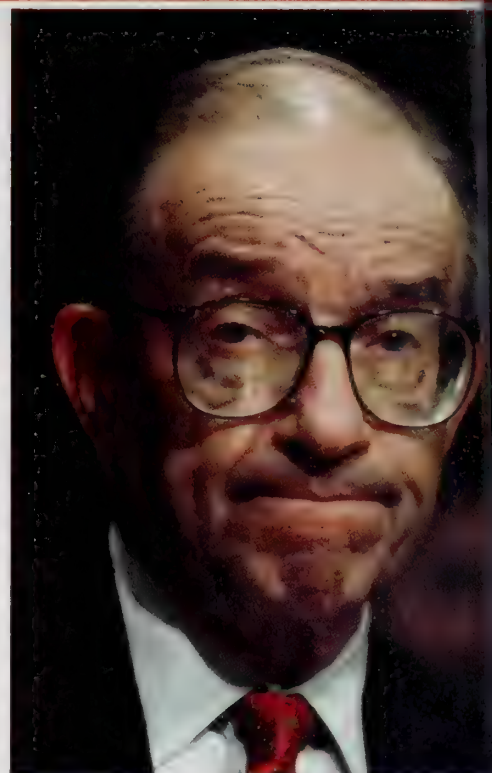
TIDBITS. But an hour later, investors had second thoughts and the market rebounded to close almost where it started the day. Why? They focused on a juicy tidbit in the Fed's announcement: While the Fed was adopting a tightening bias—which technically allows Chairman Alan Greenspan to hike at will—the central bank said it was not locked into a hike anytime soon. That, the market divined, meant no hike before January, when the economy

clears the Y2K barrier. Fed officials "want to have their bias and deny it, too," says Louis B. Crandall, chief economist at economic consultants R. H. Wrightson & Associates.

It's not surprising that the markets have trouble reading this information: Policymakers themselves disagree over what a neutral vs. a tighter bias means. In May, the first time the Fed immediately announced a change of bias—to tighten—things went fairly smoothly. The markets took the news in stride and braced for a June hike.

Things weren't so simple when the hike came on June 30, however. The Fed chose to hike the federal funds rates by a quarter-point, to 5%, but said it was neutral on an interest-rate hike in the near future. The stock and bond markets soared as investors bet that the June increase would be the Fed's last this year. Surprise. Greenspan and colleagues raised rates another quarter-point in August.

Fed officials acknowledge that transparency has not produced utmost clarity. In a Sept. 8 speech, Fed Governor Laurence H. Meyer described the new practice as a "work in progress,"



NO COMMENT: Should Greenspan & Co. talk

adding, "it has become clear that not easy to communicate some of subtleties and complexities of monetary policy intentions in a single word."

Until this year, the Fed didn't reveal its bias until six weeks after it met. The bias was only supposed to apply the six weeks between meetings. In reality, it had been a way for Fed chair to soothe policymakers with opposing views. The Fed's bias was all but ignored by investors—for good reason. Starting in 1994, the Fed hiked rates seven times, always maintaining a neutral bias.

But, Fed insiders say, it's clear the immediate dissemination of the bias has created problems. They were especially unhappy in June, when the market rallied on the neutral bias announcement. They'd like to get the market to understand what veteran Fed watchers know: Neutral won't always mean a rate increase is out of the question, and a tighter bias won't necessarily indicate that one is imminent.

If broadcasting the bias continues to cause problems, some experts say, the Fed should drop the practice in favor of more detailed explanations. "The bias is a relic of the old days of code words and secret handshakes," Crandall says. "It no longer serves any purpose." It might, perhaps, to confuse.

By Laura Cohn and Rich Miller
Washington

Sending a Clear Signal?

DATE	RATE CHANGE	BIAS	INITIAL DJIA REACTION	HOW IT WAS READ
MAY 18	NONE	TIGHTEN	-123	With growth still strong, nobody was surprised to see the Fed lean toward tightening, but not actually hike.
JUNE 30	+1/4	NEUTRAL	+226	With six weeks to get used to the idea of a hike, the market was delighted with the Fed's minimal quarter-point move and its neutral bias.
AUG. 24	+1/4	NEUTRAL	-172	But it was a mistake to take the neutral bias as a sign of no imminent rate hikes.
OCT. 5	NONE	TIGHTEN	-232	No longer expecting a hike, the market was initially dismayed by the Fed's move to a tightening bias. Later, investors decided a hike wasn't likely this year.

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DEALMAKERS

THE BIGGEST MEDIA MOGUL YOU NEVER HEARD OF

How Lowry Mays, slowly and steadily, amassed a radio empire

Sumner Redstone. Gerald Levin. Michael Eisner. Lowry Mays. Lowry who? That's L. Lowry Mays, the low-key Texas rancher who's joining the ranks of America's top media moguls. On Oct. 4, Clear Channel Communications Inc., which Mays co-founded 27 years ago with a single San Antonio station, announced the largest radio deal ever: The \$23.5 billion acquisition of Dallas-based AMFM Inc., the U.S.'s largest radio chain. If completed, the deal would give Lowry the world's largest collection of radio stations and outdoor advertising sites.

That's a big leap to prominence for the Dallas native. "Lowry Mays has never sought out publicity," says Ron Sachs, portfolio manager with Janus Capital Corp. and a longtime investor in Clear Channel. "Instead, he's quietly created a huge company that is among the best in the industry."

HEAVYWEIGHT. Investors think so. With annual revenue of \$3 billion, Clear Channel barely ranks as a welterweight. But in terms of market capitalization, at \$40 billion, the new Clear Channel is a heavyweight on Wall Street, ranking as the fourth-largest media company in the world, behind Walt Disney, Time Warner, and Viacom/CBS.

After buying AMFM, controlled by millionaire investor Thomas O. Hicks through buyout firm Hicks, Muse, Tate & Furst Inc., Clear Channel will own or have stakes in 19 television stations, 425,000 outdoor billboard displays, and 1,070 radio stations in 32 countries. At home, Clear Channel will have 830 radio stations in 187 markets—including 47 of the top 50—with daily listeners of more than 100 million. After divesting about 125 radio stations to comply with federal antitrust and ownership regulations, the deal is expected to close next year.

Mays, who will remain chairman and chief executive, launched his empire in 1972, when he co-founded Clear Channel with Billy Joe "Red" McCombs, a local auto dealer. Mays, who chipped in a \$125,000 nest egg from his previous career as an investment banker, and McCombs began by buying an unprofitable country-music station in San Antonio.

Over the next decade, Mays, a Texas

A&M University petroleum engineer and Harvard MBA graduate, slowly and steadily went about building Clear Channel and learning the radio business. "Lowry is very, very committed to everything he does," says McCombs, now owner of the Minnesota Vikings and a major Clear Channel shareholder and director. "When we started, he barely knew anything

about radio. Now he's the best optional guy in the business." Says John H. Smulyan, chief executive of an anapolis-based competitor Emmis Communications Corp: "Every year he seems to figure out a way to run it better."

His strategy: Buy weak radio stations and billboards in the same area, cut costs, beef up programming, and boost profit margins by selling advertising packages across all three media. Mays, advertisers rule. "Our customers want to sell products," says Mays. "We sell their products."

Clear Channel took off after the Federal Communications Commission loosened ownership rules for radio and tv properties in 1984, the year the company went public. Mays quickly snapped up dozens of small stations.

Though Clear Channel owns nearly four-times as many stations as CBS's Infinity Broadcasting, its average revenue of \$3.5 million per station is only one-third of its rival's. "It's a different strategy, a different philosophy," says Mel E. Mazin, CEO of CBS. "But it certainly worked well for Lowry's shareholders."

In the late '80s, Mays began acquiring TV stations the cheap and became affiliated with the upstart network. Two years ago, he added billboards to his portfolio and earlier this year revved up his radio buying again with a \$4 billion deal for real estate mogul Samuel Zell's Lorimar Communications Inc.

Even as his ambitions have grown costlier, Mays has maintained a loyal following on Wall Street. Clear Channel is ranked as one of the sector's best performers. And at 76, the stock stands 1,200% above where it was five years ago.

The Mays family—which includes Clear Channel President and Chief Operating Officer Mark Mays and CFO Randall Mays—currently hold a stake in the company, worth an estimated \$2.2 billion. After the AMFM deal closes, the family insiders will own about 6% of the company, while Hicks Muse will have 10%. People won't be asking Lowry who? much longer.

By Stephanie Anderson. First published in Dallas, with Richard Smith in New York

L. LOWRY MAYS



WHO Co-founder, Chairman, and CEO of San Antonio-based Clear Channel Communications Inc., the world's biggest radio and outdoor advertising firm

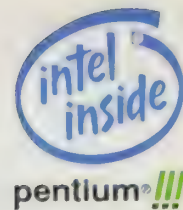
AGE 64

EDUCATION Bachelor of science degree, Texas A&M University; MBA, Harvard University

CAREER 1960s: Investment banker with San Antonio-based Russ & Co.; 1970: Founded own investment banking firm; 1972: Co-founded Clear Channel with local car dealer Billy Joe "Red" McCombs

PERSONAL Married with four children, including Mark, Clear Channel's president and COO, and Randall, the firm's CFO

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COMMENTARY

By Lee Walczak

BUSH'S DECLARATION OF INDEPENDENCE

Pat Buchanan isn't the only Republican at odds with leaders of the Grand Old Party. On Sept. 30, GOP front-runner George W. Bush blasted House Republicans for trying to free up money in the fiscal 2000 budget by deferring tax refunds owed low-income workers under the Earned Income Tax Credit. "I don't think they ought to balance their budget on the backs of the poor," Bush said. And while party leaders howled over what they termed an Austin ambush, they promptly killed off the idea on Oct. 4. Their reward: The next day, in a speech on education at the Manhattan Institute, Bush took another step away from his party's Washington leadership: "Too often, my party has confused the need for limited government with a disdain for government itself," he said.

Up to now, Bush had no problem staying in sync with GOP Hill leaders. He paid lip service to their baroque tax-cut plans and kept mum when hard-liners balked at even the most modest gun-control measures.

But his patience ran out when fellow Republicans opted to pay for tax relief for a year-long spending spree on everything from highways to missiles by fiddling with the EITC, a break that permits families earning up to \$31,000 a year to reduce tax payments by as much as \$3,800. As proposed by House Whip Tom DeLay (R-Tex.), the plan was to make the credit for the working poor a monthly rather than annual payment and thus shift about \$8.7 billion in expenditures into the next fiscal year. Bush's intervention amounts to a declaration of independence from a Capitol Hill crew that can't meet spending caps and seems



GEORGE W.: May propose more tax cuts for the poor

predestined to lay down on the tracks in front of President Clinton's "save Social Security" express train. "This was a brilliant bit of triangulation, and Bush should send [ex-Clinton Svengali] Dick Morris a thank-you note," says Republican consultant Thomas Edmonds. "Bush just made it a lot more difficult for Democrats to hang Congress around his neck."

Nonetheless, whether Bush will be able to get much political mileage from embracing the EITC is unclear, since many Democrats got there first: The program has been championed by the Clinton Administration, and Vice-President Al Gore is proposing to expand the credit. Politics aside,

though, Bush is genuinely for of the EITC, which began life in 1975 as a partial offset to payroll taxes and now helps some 20 million workers. In fact, he may make an expansion of the EITC a key feature of his own economic plan, currently scheduled for unveiling after Congress slinks home in November. He also is considering targeted rate cuts for low-income earners as well as across-the-board rate reductions.

How to pay for all this? Reducing the 15% bottom bracket to 14%, would cost close to \$26 billion a year, according to congressional tax estimates. A cheaper option under consideration: liberalizing eligibility rules for tax credits, such as the one for child care. Some Bush advisers, such as economic coordinator Lawrence B. Lindsey, would rather see him call for more fundamental changes, such as a one- or two-percentage-point cut in payroll taxes for lower-income Americans.

Where will Bush come down on taxes? He has to talk about slashing marginal tax rates to appeal to primary voters. But he'll try to keep the cuts to a minimum. Where he will differ from Congressional Republicans will be in his calls to help bottom-rung workers bypassed by the economic boom. "I'm concerned for someone who is moving from near-poverty to the middle class," Bush said on Sept. 30 during a swing through Silicon Valley.

When his tax program is released, Bush will finally get a chance to show the voters if his noblesse oblige actually translates into tangible relief for strapped families. But in the meantime, he's sending a message to a GOP Congress that seems to miss no opportunity to emphasize its negatives: Don't expect me to sink with your ship.

CANNY MOVE "Bush just made it a lot more difficult for Democrats to hang Congress around his neck"

Walczak is BUSINESS WEEK's Washington bureau chief.

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EDITED BY MARK FRANKEL

ELLISON GIVES GATES ANOTHER RAP

LARRY ELLISON WON'T GIVE UP. Four years ago, the Oracle chief predicted the demise of the PC—partly to twit archrival Bill Gates. He called the PC "absurdly complex" and predicted it would be overtaken by network computers—cheap, simple devices connected to the Web.

Needless to say, that didn't happen. But their feud lives on. On Oct. 12, at the Telecom 99 trade show in Geneva, where he and Gates both are featured speakers, Ellison plans to introduce Portal to Go, a combination Web browser and tiny database program that will allow people using cell phones and wireless handheld devices to

grab information from the Web. Ellison says he plans on practically giving the software away to telecom companies. Thus, says, Ellison, the network computer can overtake the PC at last. "Every electronic appliance becomes a network computer," he says. So there, Bill!

A NEW LEADER IN ONLINE TRAVEL

BOOKING A HONEYMOON IN cyberspace? On Oct. 4, Travelocity.com and Preview Travel announced plans to wed. They would be the Web's leading travel site, leap-frogging Microsoft's Expedia. Sabre Holdings, parent of Travelocity, will own 70% of the new company, with the rest owned by Preview stockholders. The new company is expected to have 20 million customers, booking travel sales valued at more than \$1 billion this year. That should give the business more clout with airlines and hotels and greater ability to win discounts, says Terrell Jones, CEO of the new Travelocity.com.

STATE FARM WRITES A REALLY BIG CHECK

SOMETIMES EVEN GOOD NEIGHBORS are caught misbehaving. An Oct. 4 class-action verdict by an Illinois county jury found that State Farm Mutual Automobile Insurance had breached its contract with policyholders who had filed 4.7 million claims. Now the nation's largest auto insurer must pay policyholders \$456 million because it required body shops to use cheaper, generic parts for car repairs. Although consumer groups have been pushing for less expensive parts, plaintiffs argued that generics do not work as well as the replacement parts that were produced by auto makers.

HEADLINER: HENRY YUEN

TAKING TV GUIDE TO E-LAND

Henry Yuen knows something about turning tables. Yuen, 50, announced on Oct. 4 that his Gemstar International would purchase *TV Guide* in a stock swap valued at \$9.2 billion. It was only last year that Gemstar, with 1998 revenues of \$166 million, was itself the target of a failed hostile takeover by United Video Satellite, which then went on to buy *TV Guide* from News Corp. Now the prey has captured the hunter.

Yuen is best known as the mastermind behind VCR Plus, which helps couch potatoes program

their machines. He has since devised an interactive program guide that sorts TV listings on screen. Gemstar will rename its *TV Guide International* and try to push the weekly's print advertisers to its electronic version. But Yuen has bigger plans for *TV Guide*: He sees it becoming a conduit for e-commerce, whereby clicking on an ad will allow viewers to make a purchase. In that case, every channel will be a shopping channel. Consult your *TV Guide* for details.

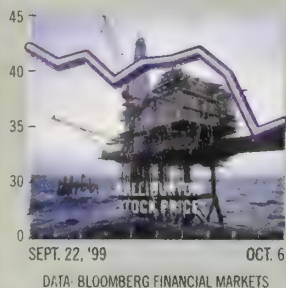
By Larry Armstrong
in Los Angeles



CLOSING BELL

STILL DRILLS

Oil prices have shot up lately, but shares of oil field service company Halliburton are heading the other way. On Oct. 5, shares of the Dallas company fell 13%, to 34½, after warnings that third-quarter earnings would miss estimates. After hitting 51 on Sept. 10, the stock has retreated and trades at its March level. Why? Oil companies are not boosting drilling until they're sure high prices will stick. Halliburton shares closed Oct. 6 at 35½.



SMILE PRETTY FOR AOL

GET READY TO BE DELUGED with more free disks. On Oct. 5, America Online unveiled the next version of its online service, AOL 5.0, for its 18 million subscribers. The centerpiece of the upgrade is You've Got Pictures, a service offered with Eastman Kodak that enables users to e-mail photos to one another. Merrill Lynch analyst Henry Blodget sees 5.0 adding \$250 million in revenues in the next fiscal year through increased ad sales and premium services. AOL shares rose 4% to 113½ on the news.

MORE GLOOM FROM GLAXO

THE WORLD'S SECOND-LARGEST drug company, Glaxo Wellcome, announced plans to ax 3,400 jobs from its 59,000-strong workforce by 2003,

saving \$590 million annually. About half of the cuts will be felt in Britain, where government is considering whether Glaxo's new flu drug Relenza will be used by National Health Service. I rejects the drug, as many expect, Chairman Richard Sykes said Glaxo will make future investments outside Britain. The restructuring comes after the company's 1999 earnings would be less than expected.

ET CETERA...

- Battle over: Phelps Dodge agreed to buy copper miner Asarco for \$2.12 billion.
- American Home Products will cut 700 jobs in its struggling agricultural business.
- German insurer Allianz in talks to buy fund company Pimco Advisors Holdings.
- I see an iMac: Apple introduced three new models of its popular computer.



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EDITED BY LEE WALCZAK

STEVE FORBES, THE NEW KING OF THE RIGHT WING

For Republicans, it has been all George W. Bush so far. But Steve Forbes is convinced that his Presidential underdog bid will soon become the focal point of a conservative-led Stop George drive. The choice boils down to "leadership, not mush," the millionaire publisher told *BUSINESS WEEK*. "I'll win by having a muscular message and hammering it in."

Before you dismiss such talk as the hot air keeping the Forbes balloon aloft, consider this: Republican hard-liners are dropping by the wayside. Former Vice-President Dan Quayle has left the race. Populist agitator Pat Buchanan appears about to leave the party for the Reform Movement. New Hampshire Senator Bob Smith has opted to run as an independent. Meanwhile, religious activists Alan Keyes and Gary Bauer are going nowhere fast.

That gives Forbes a shot at becoming the conservative alternative—and he has the checkbook to make it happen. He promises to take on Bush in key states with a \$20 million ad blitz. The spots will trumpet Forbes's bold positions while accusing Bush of boosting spending by 36% and backing tax hikes as governor of Texas. And he'll portray Bush's school reforms as more Big Government. "It's becoming clear that he's the only one with enough money to seriously challenge Bush," says Republican National Committee member Donald Devine.

SCRIPTURE. Bush has budgeted \$20 million for his own issues ads, and his aides say that their man's \$56 million war chest will overcome Forbes's financial firepower. Replies Forbes campaign manager Bill Dal Col: "We will help the front-runner spend every penny he raises."

To charm economic conservatives, Forbes backs a 17% flat tax, private Social Security accounts, tax-advantaged savings accounts for medical care, abolishing the International Monetary Fund, and axing the IRS. And while Bush is muting his social-conservative message to attract moderates,

Forbes has morphed into a Scripture-quoting religious act. He vows to appoint anti-abortion judges, promote religious home schooling, pick a pro-life running mate, and post the Commandments in classrooms.

Some true believers dismiss the New Jersey patrician as an election-year convert. But Forbes is making inroads. The Iowa conservative leader Nancy Streck. She says she switched from Buchanan to Forbes because only he could stand up to Bush. The same goes for Iowa State Senator Merlin

Bartz, who backed Lamar Alexander in 1994 and has now switched to Forbes. "The more Steve Forbes talks about issues, the more people have come to see his sincerity," says Bartz.

But Forbes has a ways to go. In a Sept. 10-14 *CNN/USA Today* poll, he mustered 18% vs. 62% for Bush. "I haven't sensed any rush to Forbes," says GOP strategist Rich Galen.

Nor are the Bushies unnerved. "We thought that, sooner or later, Forbes would emerge as the hard-right alternative," says a top Bush operative. While Bush advisers expect the race to tighten, they say Forbes has strong organizations in only a handful of states. "To be credible, you've got to demonstrate that you are a nationwide candidate," one scoffs.

So how does Forbes win the nomination? First, the mainstream GOP vote must split between Bush, Arizona Senator John McCain

and Elizabeth H. Dole, giving Forbes a breakthrough in Iowa or New Hampshire. Only then can he menace Bush in Delaware, Arizona, and South Carolina. If all that falls in place, Forbes will try to bury Bush with an ad blitz before the New York and California primaries on Mar. 7.

Thus far, Forbes has shown that he has the discipline, ideas, and money to become a player. But in this image-mania era, the cerebral approach may just not be enough.

By Richard S. Dunham



UNDERDOG with a checkbook

Forbes on the Record

He may not be setting the field on fire, but Steve Forbes is emerging as a bona fide GOP contender. On Oct. 5, Forbes talked with White House Correspondent Richard S. Dunham.

On his Presidential prospects:

We've got more substance on the table than the other candidates, and we've been gaining momentum. The contest was always going to shape up as a replay of [Ronald Reagan's campaigns in] 1976 and 1980—between the Republican Establishment, the Washington

lobbyists, and reform conservatives.

On his debate challenge to Bush:

Someday he's going to wake up and find out he's no more invulnerable than Al Gore was. I don't think people want a candidate in a bubble.

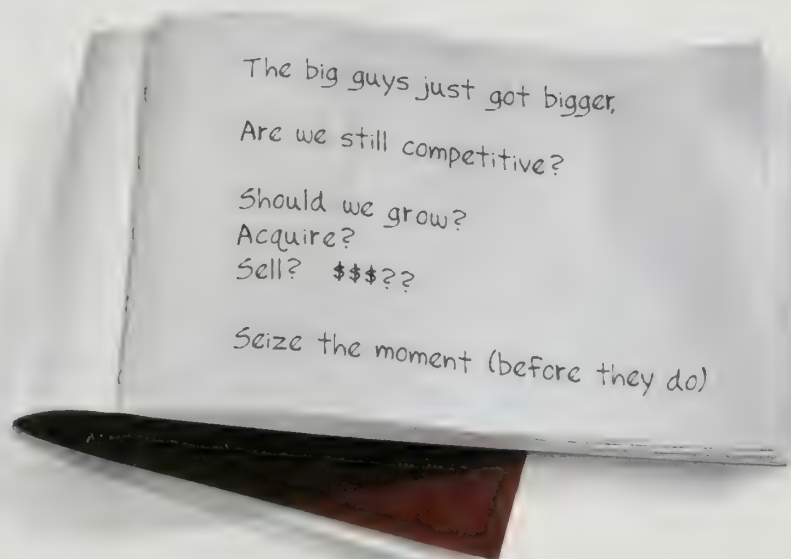
On fears that an anti-Bush ad blitz could boomerang on Forbes and help rivals John McCain or Elizabeth Dole:

That's why we're hitting hard on issues. On education, for example, Bush wants a bigger role for the govern-

ment. I want to empower parents. After seven years of photo ops and spin, people yearn for real substance.

On his critiques of Federal Reserve rate hikes and IMF lending practices:

I think [these agencies] have an appalling record. Our government and the IMF have been inadvertently supporting a new, semi-serf system in Russia. The kleptocrats are busy raiding the country. We should cut off aid until something is done about it. It's time for leadership, not tepid talk.



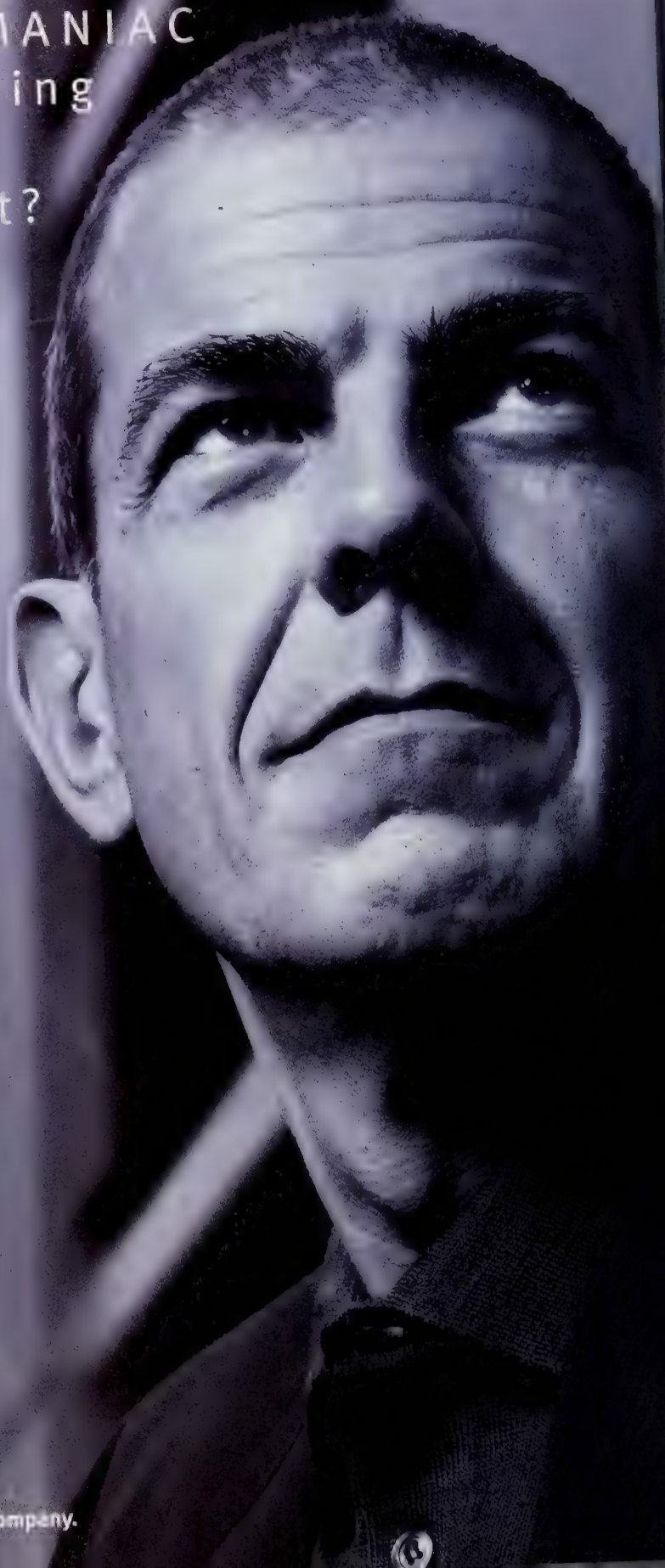
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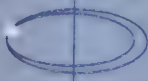
Fall, 1996. Dr. Ulrich Schumacher named CEO of Siemens Semiconductors.



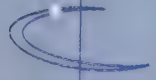
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KEEPING NEWT FLUSH AND CENTER

So far, the only thing his PACs support is Gingrich

It has been nine months since former House Speaker Newt Gingrich resigned his leadership post after a weak GOP showing in the 1998 midterm elections. The Republican Party is still working to right itself, but for Gingrich, not much has really changed. The charismatic ex-Speaker is doing what he always did best: raising large sums and preaching the Gingrich gospel.

Newt Inc. is a one-man conglomerate that pulls in money from an Atlanta consulting firm, paid positions at think tanks, memberships on corporate boards, and fat speaking fees. But at its core are two political action committees that drum up cash from Gingrich loyalists to keep his conservative ideas alive. "We are the platform for the next generation of ideas," boasts Michael Shields, a spokesman for both Gingrich PACs.

NEW TWIST. Some of what Newt is doing is fairly common among out-of-office, name-brand politicians such as Bill Bradley and Dan Quayle. For years, both have used their PACs to support staff, consultants, and travel. But in 1998, Bradley spent more than 25% of his receipts on campaign donations; Quayle spent about 4%.

Gingrich, however, is being extraordinarily aggressive in using his two PACs—one in Washington and one in Georgia. Both are called Friends of Newt Gingrich, or FONG, and together they have raised more than \$1.2 million in six months. Neither PAC has given to a political campaign yet, though Gingrich, who declined to comment for this

story, may eventually support candidates who espouse his ideas. That's if there is any money left. So far, FONG has spent nearly every penny it has taken in on salaries, direct mail, and other expenses that help Newt advance his political agenda.

Georgetown University law profes-



sor Roy A. Schotland, a campaign finance expert, calls the PACs part of a "personal perpetual motion machine." They exist to maintain the high profile of the public Gingrich while the private Gingrich rakes in five-figure speaking fees, Schotland says.

Not fair, says spokesman Shields. "For someone to as-

er underestimate the importance of people.



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sume the PAC is supporting a 'life style' is a shrill attack." He notes that Gingrich gave up a taxpayer-funded staff, security detail, and an office on Capitol Hill—perks he is entitled to as ex-Speaker.

Gingrich certainly does not miss such trappings. He commands \$50,000 a speech to groups such as the National Wholesale Druggists' Assn. and the Cadillac Dealers Assn. He's on track to take in some \$3 million in speaking fees this year.

American Enterprise Institute, a conservative Washington think tank, provides Gingrich with an office, a paycheck, a budget, and a research assistant as he mulls policy issues—something he also does for the Hoover Institution in Palo Alto, Calif.

Then there is his 90-second radio show, *Age of Possibilities*, whose terse commentaries reach 100,000 people daily on Premiere Radio, home of conservative talk-show host Rush Limbaugh. A cable-TV show and syndicated newspaper column also are in the works.

Newt Inc.

FRIENDS OF NEWT GINGRICH PACS Two political-action committees have raised \$1.2 million since January

GINGRICH GROUP Gingrich's Atlanta-based consulting firm advises companies on health care and technology

SPEAKING FEES By pulling down \$50,000 per engagement, Gingrich has taken in an estimated \$2 million since January

THINK TANKS The ex-Speaker is on staff at the American Enterprise Institute and the Hoover Institution

CORPORATE BOARDS Gingrich is an adviser at Forstmann Little and on the advisory board of Hollinger International

DATA BUSINESS WEEK

And this past spring, Gingrich hung out his shingle in Atlanta, where the Gingrich Group, in partnership with Price-waterhouseCoopers and other corporate consulting firms, is advising companies on health care and technology. The group won't reveal its client list.

In his spare time, Gingrich is an adviser to Hollinger International Inc., a Chicago-based conglomerate run by conservative Canadian media magnate Conrad Black, whose holdings include the *Chicago Sun-Times*. Hollinger wouldn't

divulge Gingrich's salary. Forstmann Little & Co., a New York leveraged-buyout firm, keeps Gingrich on its board as an unpaid adviser. And home-lending age Federal Home Loan Mortgage Corp., or Freddie Mac, employs him as a legislative consultant.

But most impressive are the PACs. The larger federal PAC provides Gingrich with a full-time staff of three and occasional temporary workers. The labor cost: about \$105,000 in the first half of '99. The federal PAC also provides

for offices in Atlanta and Washington, D.C. It even ponied up Gingrich's \$300-a-year dues to the Capitol Hill Club, a GOP social club next to party headquarters.

In the first half of '99, the federal PAC raised nearly \$1.1 million from hundreds of donors. The state affiliate took in about \$119,000. Nearly all of the state money came from "Newt Salute," an April fund-raiser. Who gave? Forstmann Little & Co. for one. The company that Gingrich advises gratis wrote a \$10,000 check. Other \$10,000 donors were Anheuser-Busch, the

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Federal election law forbids corporate donations to federal PACs and limits individual donations to \$5,000 in a calendar year. But state PACs, such as the Georgia FONG, have much greater flexibility to accept large sums of corporate money. To comply with the law, corporate gifts to Newt Salute were funneled to the Georgia PAC, where they are legal. The same was done with personal checks that exceeded \$5,000.

But the line between the two PACs is blurry at best. The federal PAC pays the state PAC's salaries, rent, and overhead. And the federal PAC laid out \$134,000 to stage Newt Salute at the Willard Inter-Continental Hotel, one block from the White House.

The fund-raiser was viewed by many as Gingrich's last hurrah in Washington, and lots of Hill luminaries showed up. But it also aroused concerns among many Republicans that money raised

"Newt is siphoning off valuable resources" needed by his party, says an ex-GOP lawmaker

at the \$1,000-a-plate affair would never see its way back into the GOP. They were right. With the capital from Newt Salute, Gingrich now hopes to drum up more money through an ambitious direct-mail operation.

Some in the GOP think Gingrich should be paying more attention to his party, which is at risk of losing its slim House majority. "Republicans are fighting for their lives to keep control of the House, and Newt is siphoning off valuable resources for his ego," complains former GOP lawmaker.

Others expect Gingrich to step up to the plate eventually. "At the right time we'll call on Newt to help," says Thomas M. Davis III, chairman of the National Republican Campaign Committee. Gingrich has indicated that he may eventually give money to candidates who pass a litmus test. They must agree to a 25% cap on all taxes, support free trade, back a missile defense system, and endorse private Social Security accounts.

Meanwhile, Newt is keeping his loyalists employed. In the first six months of this year, Joe Gaylord, Gingrich's confidante, fund-raiser, and sidekick, billed the federal PAC \$39,000

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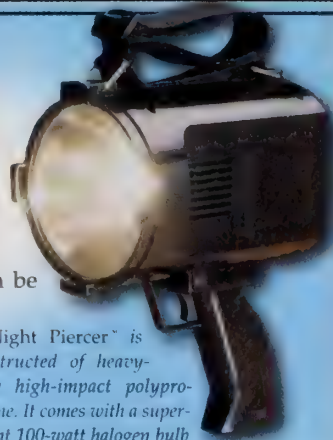
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through his consulting firm, Chesape Associates. During the same period Rachel Pearson, a former staffer in Speaker's office, was paid more than \$27,000 as a fund-raising consultant.

Campaign-finance experts who reviewed Gingrich's operation say the PACs exist entirely within the and unless donors grow weary of supporting him, the money is likely to be flowing in. Once it does, Gingrich basically do whatever he wants with it. "PACs have flexibility

His staff makes no apologies. "We're not

strong entrepreneurial operation," says a Gingrich aide

in how they spend their money," says Federal Election Commission spokesman Ian Stirton. "There's nothing in the law that says they're required to support federal candidates."

Gingrich's staff makes no apologies. The PAC "provides a platform for donors to choose to get on it," says Shields. A PAC "doesn't necessarily mean just giving checks [to candidates]. We're operating as a strong entrepreneurial operation."

"EXTREME" Campaign-finance watchdogs call FONG a typical example of a PAC following the letter, if not the spirit, of the law. "It's an extreme case of a more general phenomenon," says Donald Simon, executive vice-president of Common Cause. "These PACs operate as kind of an extra pocket...into which wealthy individuals can stuff money. Simon says Gingrich's PACs and others like them could be misleading donors who assume their money is being funneled to political candidates."

John R. Rickard, a retired parole officer from Oxnard, Calif., and longtime Newt fan, isn't one of them. Rickard, who gave \$375 to FONG, is disappointed that the donation hasn't helped "defeat the Clinton-Gore cabal" but says "it's entirely up to Newt" to decide how to spend his money. Still, no more checks will be coming from Rickard, who says he's disillusioned by Gingrich's pending divorce from his wife of 18 years. "If he cheated on his wife, he cheated on me," Rickard says. If more Newtniks start thinking like Rickard, the Gingrich money machine could start to sputter.

By Lorraine Woellert in Washington

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LEARNING TO LEAD

Technology is driving the demand for executive education—and creating lots of new options for companies

On a dark day in December, 1998, when the price of oil had fallen to its lowest level in decades, Archie W. Dunham, chairman and CEO of energy company Conoco Inc., made an unusual decision. Rather than close plants or cut spending at Conoco, Dunham decided to make a major investment—in his company's managers. He approved a new, comprehensive leadership-development program, called Trailblazer, for his senior executives. "Even though oil was at \$10, it was the right decision," says Dunham. "You're going to be successful long-term if you have good people."

Once seen as an extra doled out in flush times for top managers, executive education is suddenly every CEO's favorite strategic weapon. At a time when profits are high but the

ability of companies to attract and hang on to managers is low, Corporate America has concluded that

investing in people is the way to stay ahead. These days, winning executives' hearts requires a lot more than ponying up a raise; it means letting managers develop on the job. "[Executive education] is an investment," says Martin G. McGuinn, chairman and CEO of Mellon Bank Corp. "Employees want it because it helps them to grow in their own careers."

FAKING IT. Executives are also looking for help managing the speed of change. Although hardly new, that trend has been exacerbated by the nagging fear of becoming obsolete in a world transformed by technology. "I've never seen businesspeople have to fake it more," says B. Joseph White, dean of University of Michigan's B-school.

But if technology is driving the demand for executive education, it's also revolutionizing the way it's delivered. Companies once had a simple choice between sending execs off to attend classes on a leafy campus or doing it in-house. Today, they have a plethora of options, many of them thanks to the Net. Even such traditional providers as Harvard business school and the

Wharton School at the University of Pennsylvania realize that they must go on-line to compete.

Yet the new options aren't just coming from the elite B-schools that have long filled the demand for high-end exec ed. Today, the B-schools face an army of new rivals—consultants, Web-based learning companies, and freelance professors—eager to offer up "lifelong" learning. The surplus of choices means that sorting the wheat from the chaff can be a full-time job. "I get about six pieces of mail a day from exec ed vendors," says Stew Friedman, director of Ford Motor Co.'s Leadership Development Center. "It's hard to assess the quality."

That's why this year, for the first time ever, BUSINESS WEEK's executive education survey includes the key private and nonprofit companies in the market, along with our traditional B-school universe. Although still influential, B-schools are no longer the only game in town. Yet until now, little has been known about the scores of nonuniversity providers offering to educate Corporate America. To fill that gap, we've expanded our survey to include evaluations of 63 exec education providers, up from the

Special Report

EXECUTIVE EDUCATION





it's a great time to be in the executive education business. The average company spent about \$10 million on internal and external executive development in 1998. Of those responding, 76% said they were sending the same number of execs or more to B-school programs than they did five years ago, while 79% said the same about private companies. Overall, spending on U.S. corporate training and education for managers rose to \$16.5 billion, up 17% from last year, according to *Training* magazine. Moreover, 1998-99 revenues at the 63 providers surveyed by BUSINESS WEEK averaged \$11.9 million, up 97% from 1994, with 43% of revenues coming from custom programs designed for one or a group of companies.

With the increase in spending, however, has come a new sophistication on the part of companies. They

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EXECUTIVE MBAs

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FROM B-SCHOOL TO E-SCHOOL

Page 94

are much savvier about the changes they want to accomplish through executive education—and not shy about calling the shots. Take the Trailblazer program, which Conoco University manager David J. Nelson set up by melding together four unlikely partners—London Business School, private firm JMW Consultants Inc., the nonprofit Center for Creative Leadership (CCL),

and Conoco University, whose faculty includes executives such as CEO Dunham. The three-year program will put some 180 fast-trackers through three customized sessions in London and Houston over nine months, with Net-based projects in between. "We never got the sense that [one provider] had what we were looking for," Nelson says.

ONLINE RUSH. Conoco isn't the only company happy about the expanded possibilities being created. Some 78% of those responding to the BUSINESS WEEK survey said the quality of executive education had improved from five years ago. But the elite B-schools who have long dominated may have greater reason for concern: Asked for the first time who is the most effective provider of executive education, some 53% of those surveyed said that consultants were tops. Only 39% said the same of B-schools. It's a dramatic statement by companies, who are increasingly looking for the same bottom-line results out of their educational spending as they expect out of any other investment. That sentiment is forcing some B-schools to act like, well, consultants. At Indiana University, the executive education arm of the Kelley B-school spun off into a separate organization last January.

"It will allow us the opportunity to run more like an independent business," says Camden C. Danielson, President of Kelley Executive Partners.

What other trends stand out? Among the providers, the biggest change may be the rush to go online. Through its Wharton Direct arm, for example, the prestigious Wharton B-

iversity programs we ranked in 1997. And to insure the broadest coverage possible of this rapidly growing market, our executive MBA survey has also grown to take in 100 schools, more than last time.

The insights gleaned from the expanded survey make one thing clear: The unquenchable thirst for learning means that

school now teaches courses such as "Using Financial Statements" to students in 19 cities who interact via satellite and computer. It's quite a shift for teachers like John R. Percival, adjunct professor of finance, who

They know that their basic "business model"—campus-based teaching—could someday be threatened by today's "click and mortar" strategy. But if they don't do it, someone else surely will. "We have been functioning and operating in an ultimate elitist environment for 1,000 years," says Moshe Feldberg, dean of Columbia Business School. [The Internet] "is the instrument for democratizing intellectual capital."

Online or off, who best meets the training needs of corporate management? Focusing exclusively on companies—the users of all exec ed—we asked heads of executive development

must put on makeup and lecture into a camera these days.

Like many of the executives who turn to them for help, the universities approach the advance with some trepidation.

BUSINESS WEEK'S TOP 20 FOR NONDEGREE STUDY

The best in management education, ranked according to a BUSINESS WEEK survey of corporate management development executives

RANKING/ PROVIDER	1998-99 REVENUE MILLIONS	5-YR GROWTH	PROGRAMS OFFERED	% CUSTOM PROGRAMS*	FAC. WITH 5 YRS CORP. EXP.	SURVEY DETAILS
1. HARVARD Boston	\$65.0**	124%	69	25%	8%	Best in general management, No.2 in leadership. About to offer exec ed courses at Silicon Valley location.
2. MICHIGAN Ann Arbor, Mich.	25.3	29	79	17	25	No.1 in human resources, second in general management. Top clients include Reuters, Ford, Sony.
3. PENNSYLVANIA (Wharton) Philadelphia	40.1	151	89	29	10	Best in accounting, No.2 in entrepreneurship, third in marketing. Online offering Wharton Direct cited as creative by educators.
4. NORTHWESTERN (Kellogg) Evanston, Ill.	31.0	158	129	52	10	Top score in marketing, No.5 in general management. Major clients include U.S. Navy and AT&T.
5. STANFORD Stanford, Calif.	11.0	43	18	2	20	No.1 in innovation, fourth in general management, e-commerce, and entrepreneurship. Customers include Hewlett-Packard.
6. VIRGINIA (Darden) Charlottesville	16.7	71	70	48	34	Second in custom programs, third in leadership, fourth in marketing. Running innovative e-commerce program with PwC.
7. CENTER FOR CREATIVE LEADERSHIP Greensboro, N.C.	50.6	120	810	47	50	Only non-B-school to crack the top 20. Tops in leadership, cited as creative by providers, third in innovation, custom programs
8. DUKE (Fuqua) Durham, N.C.	14.0	94	19	81	35	Fourth in custom, running marketing program with London. Working with Ford and AT&T.
9. INSEAD Fontainebleau, France	40.0	60	124	41	5	Top-ranked non-U.S. provider. Best in global business. Doing custom work with Pfizer, Alcatel.
10. COLUMBIA New York	16.0	135	51	36	60	Second in marketing. Working with Sony, Deloitte & Touche. Runs popular Value Investing course in New York, London.
11. IMD Lausanne, Switzerland	35.3	69	74	57	8	Third in global, fourth in innovation, fifth in custom. Professors are paid on merit.
12. MIT (Sloan) Cambridge, Mass.	9.3	303	37	38	20	Best in e-commerce, second in innovation. J&J, Siemens are among top customers. Running programs in Spain, Taiwan.
13. NORTH CAROLINA (Kenan-Flagler) Chapel Hill	5.2	49	43	49	42	Top customers include Bank of America, Nortel Networks. Running a program in Iceland.
14. BABSON (Olin) Wellesley, Mass.	9.3	199	65	85	55	Tops in entrepreneurship, say companies and educators. Partnering with Bain & Co. on program "The Loyalty Effect."
15. DARTMOUTH (Tuck) Hanover, N.H.	3.7	147	15	29	39	Innovative Global 2020 program partners with HEC, Oxford, and seven companies. Ranked fifth in entrepreneurship.
16. CHICAGO Chicago	4.3	***	18	16	34	Second in accounting. Major clients include Andersen Consulting. In 2000 will offer open programs in Singapore.
17. THUNDERBIRD Glendale, Ariz.	10.0	317	122	78	30	No. 2 slot in global business. Partnering with corporate universities at Motorola and General Motors.
18. LONDON London, England	20.3	123	59	50	60	New "Masterclasses" targeted to alums. Fifth in global business. Major customers: Exxon, British Telecom.
19. PENN STATE (Smeal) University Park, Penn.	5.5	57	55	60	90	Running logistics programs in Singapore, Venezuela. Top clients include Aramark, GM.
20. INDIANA (Kelley) Bloomington, Ind.	4.3	79	34	99	27	Custom programs only. Top customers include Whirlpool, Rolls Royce. Exec ed program splitting off from university.

* % of total revenue

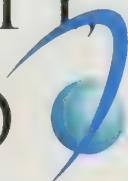
**BW estimate

***Began offering exec ed in 1996

Rankings were determined by a BUSINESS WEEK online survey sent to 587 companies. 273 replied, for a response rate of 47%.

Companies indicated familiarity with both university and private-sector providers and ranked them in order of preference, with a No.1 ranking assigned 10 points, No.2 nine points, etc. To get the rankings, the mean scores were multiplied by the number of companies ranking them and divided by the number of companies that indicated familiarity.

DATA: BUSINESS WEEK SURVEYS (RESEARCH BY MICA SCHNEIDER, JENNIFER REINGOLD, NADAV ENBAR, CAMBRIA CONSULTING)

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Where Business Goes to Learn

Who's the best at providing specialized courses for these key subjects? Corporate management development executives pick their favorites

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4. Stanford
5. Harvard

CUSTOMIZED PROGRAMS

1. AchieveGlobal
2. Virginia (Darden)
3. Center for Creative Leadership
4. Duke (Fuqua)
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4. IMD
5. Berkeley (Haas)

GLOBAL BUSINESS

1. INSEAD
2. Thunderbird
3. IMD
4. Harvard
5. London Business School

at 587 large global companies to rank the best in an online survey. We received 273 surveys back, for a response rate of 47%. The resulting rankings can be found on page 78 and above. A host of other information, including school profiles and extensive survey data, can also be found online at http://www.businessweek.com/bschools/exec_ed/index.htm.

For now, the B-schools remain atop the charts, although their perch is not as lofty as it once was. For the second time in a row, the winner in nondegree executive education was Harvard B-school, with Michigan Business School as runner-up. Coming in third was Wharton, followed by Northwestern University's J. L. Kellogg Graduate School of Management, and Stanford business school. Harvard's repeat as No. 1 comes in part from its vast array of choices. Even as it opens a new exec ed residential center on its lush Boston campus, it is also getting set to offer open-enrollment courses at its Menlo Park-based California Research Center. Moreover, Harvard has rapidly expanded custom programs, to 25% of revenues. And in a bold move, it is considering offering much of its exec ed to alumni and others on the Web.

also apply to higher level execs have wowed clients. "We like we got a product that was customized to exactly what needed," says Glen C. Sunnergren, director of human resources at The Clorox Co. "We didn't get things shoved down our throat because it was prized research."

NET EDGE. Wherever they send their execs, the companies surveyed by BUSINESS WEEK were consistent in naming the subjects they want them to learn—how to become a leader, how to act entrepreneurially, and, especially, how to deal with the Net. That spells opportunity for those providers able to offer answers to e-questions. One example is PricewaterhouseCoopers' three-day program on e-business, designed with the University of Virginia's Darden School. Darden created eight live e-business case studies for the program, bringing in CEOs from the likes of Value America Inc. and Lending Tree.com to discuss their e-commerce strategies. PWC is now exporting the program to other B-schools so more partners can attend.

Will the renewed emphasis on exec ed outlast a downturn in part, that may require companies to come up with a way to measure its impact in dollars and cents. Already, 30% of the companies surveyed by BUSINESS WEEK have tried to quantify their programs' success, though few report solid results. Yet Raymond V. Gilmartin, chairman and CEO of Merck & Co., thinks reduced turnover could be one measure of his two-year leadership training program. "We are very pleased with our ability to keep talented people," he says. "You have to believe this effort is working."

Other qualities—such as improved leadership abilities—are surely no less valuable, even if not measurable. John V. Humphrey, chairman of The Forum Corp., a private-sector exec ed provider, thinks that the investment in people will pay off as they reach top management levels. "I think they are the golden years," he says. "We'll look back and say this is when companies tuned in to learning." In a world desperate for leadership, he may be right.

By Jennifer Reingold, with Mica Schneider in New York and Kerry Capell in London

This Special Report continues on page 8

Special Report

EXECUTIVE EDUCATION

Creative Leadership (CCL), the only non-B-school to crack the Top 20. A nonprofit group with \$51 million in revenues, CCL has long been highly regarded for its focus on strengthening leadership skills. Clients include such companies as General Motors Corp. As people skills have become top-of-mind, demand has soared. "The interest in developing leadership is very broad and very significant," says John Alexander, CCL's president.

The rankings in specific subject areas contained some surprises as well. In leadership, CCL also cleanly beat its B-school rivals. Elsewhere, the universities retained their lead: Harvard dominated in general management, Massachusetts Institute of Technology's Sloan School of Management took e-commerce, and France's INSEAD led in global business. But in the hot market for custom programs—those tailored to a company's specific needs—private company AchieveGlobal, a unit of The Times Mirror Co., took the No. 1 spot. Although primarily known as a training company that works with low-to-mid level employees, its tailored courses that

BusinessWeek ONLINE

For a closer look at Business Week's ranking methodology, additional tables, and 163 EMBA and exec ed program profiles, go to: www.businessweek.com/bschools/exec_ed/index.htm

A WORLD WITHOUT WIRES

RICOCHET MAKES WIRELESS CONNECTIVITY A REALITY

Los Gatos, Calif., on the southern edge of Silicon Valley, is one of the most beautiful towns on the West Coast. With its quaint, shop-lined Main Street and its rolling, tree-lined hills, it is a quiet refuge from the hyperdriven Internet enclaves to the north, a remnant of a simpler time. Hardly the place for a revolution.

Or maybe not. A dramatic transformation in the way we communicate is just now emerging from this century-old town, a transformation that promises to perfect the mobility first made possible by laptop computers. It's called "wireless connectivity."

The future, however, may have another name for it: Ricochet.

A WIRELESS EXPLOSION

Timothy Dreisbach has a vision: offering business people the ability to wirelessly tap into their world, wherever they go. "Our ultimate goal is to allow mobile professionals to take their full desktop functionality with them anywhere they need to work,... accessing data and applications on corporate LANs and the Internet" without having to search for a land-line connection.

Mr. Dreisbach is President and CEO of Metricom, the Los Gatos-based company that is helping to translate this vision into reality. Its Ricochet service, the industry's leading wireless connectivity solution, is now available in a handful of major cities and airports. But soon, it may be as ubiquitous as the cellular telephone.

The Gartner Group thinks so. This past Spring, the Stamford, Conn., based research firm released projections that the wireless market will expand at a compound annual

growth rate of 92% through 2003, "driving an explosion of end-user purchases over the next five years."

Metricom is doing its part to make those projections an understatement. Having recently signed a national distribution agreement with MCI WorldCom, Metricom plans to offer wireless service in 12 major metropolitan areas by mid-2000, and in virtually all major U.S. cities by mid-2001. Deployment plans are right on target. "We are full speed ahead," says Mr. Dreisbach.

A ROBUST INFRASTRUCTURE

One key factor in this rapid roll-out is that Ricochet's technological infrastructure is surprisingly straightforward, consisting of four main components:

- The Ricochet wireless modem, a peripheral the size of a small paperback book that plugs directly into a desktop, laptop, or PDA serial port.
- Network radios, small radio receivers installed inconspicuously on street lights every half mile within a service area.
- Wired Access Points, which convert the Ricochet modem radio frequency (RF) signals so that they can be sent over the company's wired network backbone.
- The Ricochet Name Server, which sits on the Metricom backbone and validates subscriber information and service requests.

ISDN SPEED—WITHOUT WIRES

With this infrastructure, Ricochet modems connect computer users to the Internet or to company systems in a manner that operates indistinguishably from a land-based telephone connection. And this past July, Metricom



Timothy A. Dreisbach,
President and CEO,
Metricom

(Continued)

TAKE THE WORLD WITH YOU
TOSHIBA



Powerful. Presenting the Portégé® 3110CT notebook. Inside its ultra-thin, ultra-light case, Toshiba gives you the performance edge of an Intel® Pentium® II processor 300MHz, a 6.4 billion-byte hard drive and 64MB of high-speed SDRAM. That's just what it takes to handle a heavy workload on the run with an ultraportable PC that won't weigh you down.



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A WORLD WITHOUT WIRES

achieved a key milestone that promises even better performance in the future: completion of a 128 kbps (ISDN speed) wireless beta test in which 80% of participants said the service exceeded their expectations and 94% found it easy to use.

"Ricochet was designed from inception to serve professionals with the highest speed available for mobile data access," says John Wernke, Metricom's Senior Vice President of Marketing and Sales. The test "proves 128 kbps mobile data access is a reality."

Of course, anyone who has used a cellular telephone is familiar with a key shortcoming of wireless transmission: limited security and privacy. Metricom has overcome this problem by adopting a technology used by the military since the 1950s that goes by the cumbersome name "frequency-hopping, spread-spectrum radio transmissions." What this means in practice is that Ricochet signals randomly hop over 162 channels, occupying each for only four-tenths of a second, making interception and deciphering virtually impossible.

A COMPETITIVE ADVANTAGE

These technological innovations have been a financial boon for the early-adopter contingent of Corporate America. Already, despite the novelty of wireless connectivity, a number of mainline organizations have discovered that wireless technology can yield significant bottom-line benefits:

- Washington, D.C., commercial food distributor Atlanta Foods has equipped its sales representatives with Ricochet modems, allowing them to submit orders from the field electronically, saving up to 25 hours' drive time per month that they can now devote to additional sales.
- Numerous Washington, D.C., corporate lobbyists now use Ricochet modems, permitting them to send e-mail directly from the House and Senate floor, minimizing the need for lengthy and inefficient voice mails.



John Wernke,
Senior Vice President,
Marketing and Sales, Metricom

- CalTrans, the State agency responsible for California's freeways, has deployed Ricochet modems to read devices that monitor freeway traffic—a move that eliminated the need for 700 separate telephone lines for data communication.

- XEROX, the multinational document processing company, has equipped field technicians with Ricochet modems, significantly increasing technicians' daily productivity.

Even software giant Microsoft is enthusiastic about the value of moving away from the confines of the desktop. Says Mark O'Donnell, its government accounts manager, "With Ricochet, no matter where I am..., I have access to the information I need to do my job. I can demonstrate Microsoft products live"—without hav-

ing to worry where the meeting takes place or whether there are telephone lines available, "...which gives me the competitive advantage I need."

PERSONAL PRODUCTIVITY

But perhaps the ultimate benefit of Metricom's wireless technology comes from the personal productivity that it enables. Gary Drake, a Seattle, Wash., businessman, spends two hours each day on the ferry commuting from his home on Bainbridge Island. He occupies this time by connecting to the rest of the world with his laptop computer and Ricochet modem. When he adds up the time saved, he accomplishes an extra day's work every week.

It's the perfect productivity solution, he says, "for anyone with a laptop and a long commute."

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TAKE THE WORLD WITH YOU
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WHERE BIG SHOTS LEARN TO THINK LIKE HOTSHOTS

Can entrepreneurial skills be taught? Babson is taking a crack at it

What with increased competition from nimble e-commerce startups and the escalating flight of key talent to dot.coms, it's a trying time for Big Business. With even such corporate heavyweights as Andersen Consulting Chief Executive George T. Shaheen leaving for the helm of online grocer Webvan Group, many in Corporate America question whether big still means better.

For big company execs who have not yet abandoned ship, however, today's fast-moving economy has intensified the search for ways to make their

OF THE BOX: Zavitz of Dow Chemical got a crash course in e-commerce strategies

But, often bureaucratic, corporations are becoming more entrepreneurial. To get the help they need, many are turning to executive education. According to New York-based consultant Corporate University Xchange Inc., company-run universities are spending an average of \$3.4 million annually on leadership and innovation programs, some \$1,000 of which is going toward entrepreneurial training. But can classroom learning actually teach an old-school executive the entrepreneurial tricks? Business schools such as the Wesley (Mass.)-based Babson School of Executive Education are so. Rated top provider of entrepreneurship-related skills in BUSINESS WEEK's 1999 executive education survey, Babson has been teaching undergrads and MBA students how to start a business for 25 years. Five years ago, it began teaching courses in corporate "intrapreneurship" aimed specifically at executives in large companies. The goal: to inculcate a "startup" mentality by teaching divisional managers how to spot the ways in which their companies may stifle risk-taking or discourage them from solving problems from a broader, companywide perspective. To eliminate those roadblocks, Babson figures, and its graduates will be able to develop new businesses far more efficiently.

That's the key message behind Babson's new week-long Consortium for Executive Development. This year, managers from six companies, including Dow Chemical Co. and Electric Data Systems Corp., participated. Each sent three to six people to Babson for two weeks in June and two in September. They studied case studies of product launches from other large corporations, compared how their participant company would tackle a given problem, then applied the lessons to their own companies. It may seem strange to draw entrepreneurial examples largely from other

corporate giants, but Stephen A. Allen III, professor of management and international business at Babson, argues that the success of a company's entrepreneurial effort depends not on its size but on its culture.

Babson has made a believer out of Consortium graduate Darrell J. Zavitz, a 13-year Dow veteran. Recently promoted to run information systems operations for Dow's polystyrene and engineering plastics divisions, Zavitz came hoping to learn how to better exploit the possibilities of the Internet. His exposure to the way Ford, Thermo Electron, and Polysar Rubber launched new products helped him spot potential problems at Dow that could torpedo his efforts to develop e-commerce initiatives. He figures the decentralized process used by Thermo to develop new ideas, for example, is worth testing against the more bureaucratic procedures Dow now has in place.

So is Zavitz really a Web-savvy "intrapreneur" after four short weeks at school? Many of today's Internet folks are skeptical. "You learn it by doing it," says Seth Tapper, president of customized Web design startup LiveUniverse.com. To succeed as an entrepreneur "there has to be a creative spirit, and that's something that cannot be classroom-taught."

But for Marianne G. Cooper, president of EDS' food and consumer packaged goods division, the benefits of the Consortium are tangible. A graduate of last year's Babson program, she now understands more clearly how her company's 30 or so divisions interrelate. That made it easier for her to work with several units within EDS to develop UCCnet, an Internet trading network for the Uniform Code Council, which makes the UPC codes found on all packaged goods. "Historically, we would have tried to create an offering for one division," she says. "The class helped me look at offerings across the company."

With their futures on the line, large companies are likely to keep trying whatever can help spark a more entrepreneurial culture—despite the doubters. For Corporate America, the challenge is to beat the new kids on the block at their own game—and they're willing to pay big for anyone who can help them learn how to think small.

By Nadav Enbar in New York



TOPS IN ENTREPRENEURSHIP

1. Babson
2. Pennsylvania (Wharton)
3. Harvard
4. Stanford
5. Dartmouth (Tuck)

DATA: BUSINESS WEEK SURVEY OF 273 COMPANIES

Special Report

EXECUTIVE EDUCATION



PEOPLE IN SOUTHERN CALIFORNIA

are always looking

FOR RADICAL

NEW WAYS

TO GET AROUND

If it's new and it's got wheels, chances are it came from Southern California. People here aren't just content to walk, they'd rather pedal, skate or scoot.

Maybe it's great weather that inspires Southern Californians to design so many ways

The Prius hybrid vehicle



Toyota's design center, CA

to get out and about. Or maybe it's the wide-open spaces. Whatever it is, innovation is no stranger to the roads and pathways of this beautiful corner of the world.

It's probably no coincidence, then, that the design for the world's first mass-produced hybrid vehicle was developed in Southern California. In Newport Beach, to be precise, at Toyota's futuristic North American design center, known as Caltex.

Here, a team of designers created the look that is already turning heads overseas for Toyota's breakthrough alternative fuel vehicle, the Prius.

Caltex is part of Toyota's global network of operations. It's a network that includes facilities in 25 countries and provides jobs and growth in communities around the world.

Here in the U.S., Toyota directly employs more than 25,000 individuals. In fact, more than half the Toyotas sold in America are built by Americans, using many U.S. parts.

Local investment helps Toyota develop vehicles that are suited to the special needs of the communities where we do business. It's not such a radical idea, even if sometimes the results may seem that way.

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THE EXECUTIVE MBA YOUR WAY

How B-schools are making it easier to juggle work, classes, and family



The Executive MBA program (EMBA) of Columbia University Graduate School of Business has never had trouble attracting students, and Sept. 25 was no exception. Every seat was filled for the first day of classes of a rigorous program that will meet on campus every Friday for the next 21 months. Yet that wasn't the only option: With demand soaring, Columbia has also opened up the course to executives who prefer an every-other-weekend schedule.

Down in Athens, Ga., a group of students at the University of Georgia's Terry College of Business also began its degree program, and it too, features something new. All the students in this program work full-time for PricewaterhouseCoopers, and few live near Athens. They just spent two

weeks on campus and will return regularly over two years. Not only will the

Special Report

EXECUTIVE EDUCATION

PWC students get most of their coursework online, but it has been customized specifically for the global consultant.

Welcome to the world of the tailor-made Executive MBA. The combination of the Internet and increased competition are forcing B-schools to become far more flexible in their EMBA programs. No longer do students have to attend programs close to home on a take-it-or-leave-it schedule. These days, students—and their employers—have much greater freedom to design EMBAs to suit their needs. “The old ‘go to class on alternating Fridays and Saturdays’ is not the only way to do it anymore,” says Charles W. Hickman, head of projects and services at the AACSB-International Association for Management Education, the B-schools’ accrediting group.

It's a shift that seems to be working. Thanks to the roaring

job market and companies’ intense need for skilled managers, the EMBA degree is hotter than hot. Of the 100 schools surveyed by BUSINESS WEEK for its biennial EMBA project, the average program graduated 61 EMBAs this year, up from five years ago. Moreover, the number of programs has risen sharply over the last decade. Just 55 schools awarded EMBA degrees in 1988; today, 190 accredited programs exist, including overseas, says David L. Poole, chair of the board of trustees of the EMBA Council. And their students are no slouches: They in BUSINESS WEEK’s survey average an \$88,000 salary and 10 years’ work experience.

ONLINE ACCESS. It's also quite a busy group. Many would be able to earn the EMBA if they couldn't do much of the work online (see page 94) at whatever time, day or night, that suits them. According to the BUSINESS WEEK survey, an average 10% of the EMBA curriculum is now delivered online, even at on-campus programs. That's key for students struggling to juggle work, school, and family. “The flexibility of [PWC] program makes it appealing,” says Roy Greco, a principal consultant in PWC’s customer relationship management practice.

The freedom from a biweekly schedule has also allowed many programs to beef up their global coursework—a big issue for many sponsoring companies. One innovative program is the new Duke MBA-Cross-Continent at the university's Fuqua School of Business, set to begin next August in both Frankfurt and Durham, N. C. The program consists of eight terms, each requiring one week on campus followed by six weeks of online work. The students will spend at least four terms at their home campuses; then they will combine to attend elective courses held either in Germany or the U.S. “This is a model that fits our own understanding of the

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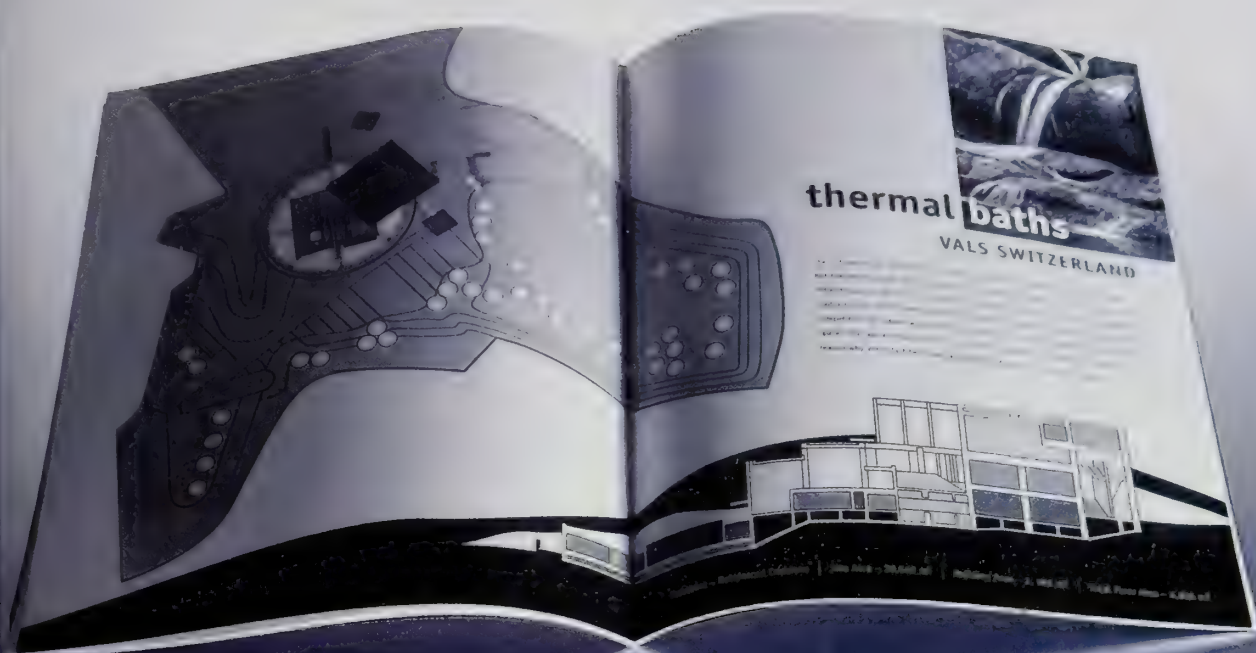
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changes of the future, globalization, and technology," says Martin Moerhle, head of executive education at Deutsche Bank, one of the corporate sponsors.

That's just one way that universities are trying to ensure that EMBA graduates make a bottom-line impact when they return to work. At Rutgers University in New Jersey, this year's EMBA students must choose two relevant concepts at the end of each class. At the end of the 18-course program, they must create a case study using all of the items selected. The hope is that the

EMBA students will retain enough hard information to address the challenges that bedevil them back at the office.

Moreover, like PWC, many companies are creating customized EMBA programs for their execs only. Texas Instruments and BellSouth Corp., for example, have set up EMBA programs at the University of Texas at Austin and Kennesaw State. And by creating an in-house EMBA degree at Ford Motor Co., Stew Friedman, the director of the auto maker's new Leadership Development Center, may cut out the schools altogether. His goal: "To train and inculcate and radicalize a core of leaders within the company," he says. It's a new role for the EMBA—but in a management-saturated era, not a surprising one.

By Jennifer Reingold, with Mica Schneider, in New York

Special Report

EXECUTIVE EDUCATION

20 LEADING EXECUTIVE MBA PROGRAMS

A comparison of some leading schools offering the Executive MBA degree, based on a survey of 100 deans.

SCHOOL	TOTAL TUITION*	AVERAGE MGR. SALARY**	AVERAGE WORK EXPERIENCE (YEARS)	SELECTIVITY (PERCENT OF APPLICANTS ADMITTED)	HIGHLIGHTS
CASE WESTERN RESERVE (Weatherhead) Cleveland	\$65,000	\$111,455	14	81%	Runs EMBA programs in Austria and Hungary. Program concludes with a class on personal development.
CHICAGO Chicago	71,000	124,000	16	45	First EMBA program (1943). Set to launch a globally integrated EMBA in Chicago, Barcelona, Singapore, in 2000.
COLUMBIA New York	88,000	148,000	10	40	New building opened January 1999. Ex-AlliedSignal CEO Larry Bossidy will be an executive-in-residence.
DUKE (Fuqua) Durham, N.C.	60,300	132,000***	12	67	Set to launch innovative MBA-Cross-Continent next summer. Students spend time online and at Frankfurt, Durham campus.
EMORY (Goizueta) Atlanta	57,200	115,503	13	59	Weaves e-commerce topics throughout the program. Added health-care specialization.
GEORGIA STATE Atlanta	56,100	77,000	15	64	International study trip has students present a paper to a selected company's execs.
ILLINOIS Champaign	41,400	77,000	13	63	Offers students in Chicago the opportunity to earn a virtual EMBA through videoconferencing, the Internet.
MINNESOTA (Carlson) Minneapolis	42,000	100,000***	13	68	Will roll out an EMBA in China in 2000 to go along with partnerships in Poland and Austria.
NYU (Stern) New York	90,800	130,000	11	32	Highest percentage of intl. students (29%). Technology and entertainment majors can study in Palo Alto or Hollywood.
NORTH CAROLINA (Kenan-Flagler) Chapel Hill	42,000	80,033	11	60	Working with University Access to create an online EMBA program. Will open new executive center in 2000.
NORTHWESTERN (Kellogg) Evanston, Ill.	73,500	151,219	15	40	Largest total enrollment (421) in leading 20. Offers EMBA's with partners in Israel, Hong Kong, Germany.
PENNSYLVANIA (Wharton) Philadelphia	92,400†	142,000	10	20	Highest average GMAT (686) for this year's entering class. Most selective. New elective on marketing and e-commerce.
PEPPERDINE (Graziadio) Culver City, Calif.	57,375	118,142	18	78	Four locations in Southern and Northern California. Also runs a special EMBA for high-level execs.
PITTSBURGH (Katz) Pittsburgh	36,000	77,000	13	64	Offers international EMBA in Prague, planning one in Brazil. New computer-simulation course anchors the program.
PURDUE (Krannert) West Lafayette, Ind.	39,000	87,000	11	52	Only 2% of attending executives live within a 45-mile radius. Program offered in six two-week sessions.
SOUTHERN CALIFORNIA (Marshall) Los Angeles	57,800	106,000	16	50	Integrated program emphasizes 10 themes, such as "Role of the Global Executive," rather than functional areas.
SOUTHERN METHODIST (Cox) Dallas	45,825	138,346	18	43	Program uses a headhunter, counseling, and assessment tools to assist those considering career changes.
TEXAS Austin	53,000	95,000	13	43	Highest percentage of students with advanced degrees (51%). Innovative customized program with Texas Instruments.
UCLA (Anderson) Los Angeles	59,100	157,521	15	31	Highest percentage of students from small companies (40%). Students do a seven-month international consulting project.
WASHINGTON (Olin) St. Louis	54,900	92,496	15	86	Tripled number of elective requirements. Highest percentage of students from nonprofits (15%).

* All tuition costs for out of state residents

**For flagship program

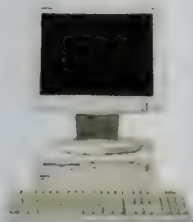
***BW estimates

†Price includes room and board

DATA: BUSINESS WEEK (RESEARCH: MICA SCHNEIDER, NADAV ENBAR, JENNIFER REINGOLD, CAMBRIA CONSULTING GROUP)

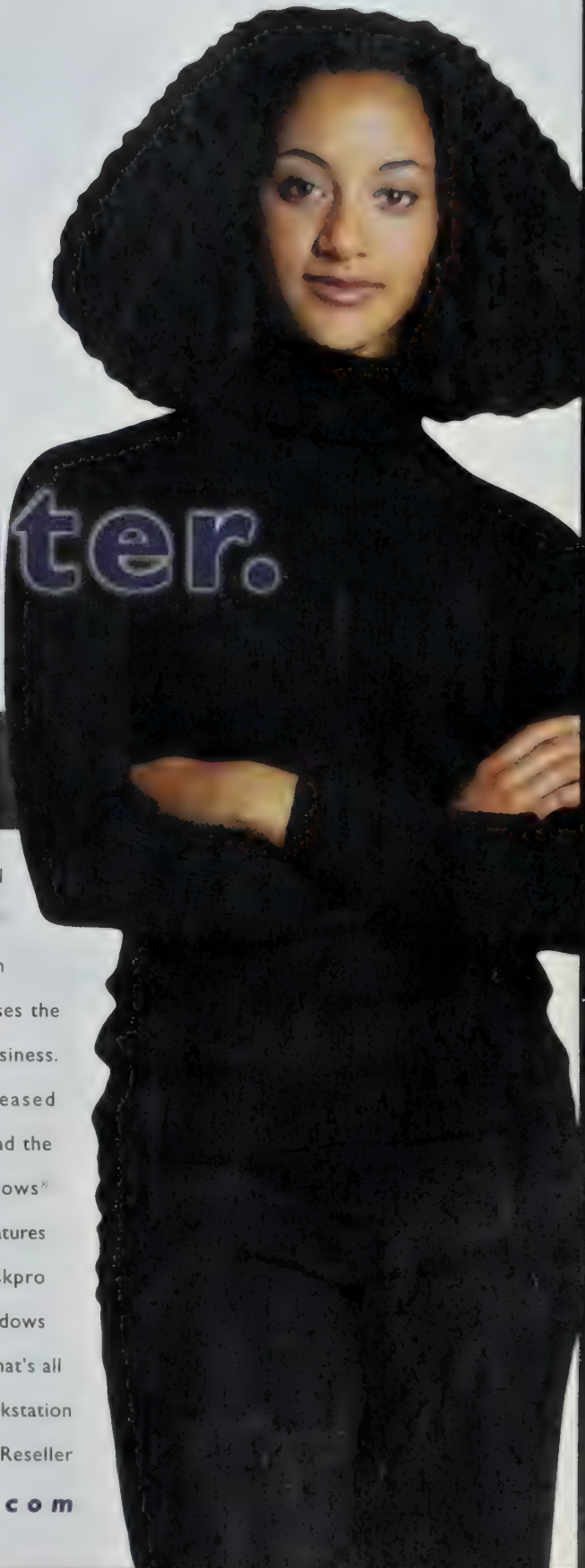
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*InterSearch Windows 95 User Reliability Study (6/95). †Participants using Windows NT Workstation were about three times less likely to experience serious system stoppages than users of Windows 95 surveyed since then, compared Windows NT Workstation 4.0 to Windows 95 operating systems using Dell Dells (Dell's Windows 95 1.0 on computers with 64MB of RAM) first performed without verification by ID. ID makes no representation or warranties. Windows is a registered trademark or trademark of ID Inc. in the U.S. and other countries.

TURNING B-SCHOOL INTO E-SCHOOL

Startups offering online MBA courses to corporations are acting like B-schools

In the fall of 1998, Lawrence A. Weinbach, the new CEO of Unisys Corp., decided that the information technology services provider needed to change its culture. But in a company bruised by layoffs, declining sales, and the resignation of the preceding CEO, that was easier said than done. So he created Unisys University, an in-house training facility, and charged it with establishing "a highly people-oriented culture, not the autocratic one we had," says Ray Jackson, senior consultant to the university's leadership school.

Jackson considered hiring consultants or sending his executives to business school, but decided not to. Instead, he created his own five-day course, and turned to tiny software startup Pensare Inc. to create an online program to supplement his face-to-face classes. "When you want to change a culture, you want to do as much of it on your own as you can," says Jackson.

ENERGIZED. Today, everyone from Unisys' senior execs to its younger fast-track stars logs on to tiny Pensare's Distinctive Leadership courses from their desktops. Customized materials were developed by Pensare and a former professor from the University of Southern California's Marshall School of Business. To go along with Jackson's seminar on leadership, for example, Pensare produced case studies and interviews with famous leaders. By yearend, about 400 Unisys managers will have taken courses through Pensare. And



although Jackson can't link Unisys' higher stock prices to the course work,

"we're seeing good things happen," he says. Jackson says executives are energized and communicating better.

Pensare—the name means "to think" in Italian—is just one of a handful of private sector companies making a splash in the executive education market. Founded by Chairman and CEO Douglas E. Donzelli, an entrepreneur who sold a previous startup to Novell, Inc., Pensare aims to bring the best courses from top B-schools together in one place online. Companies will then be able to pick and choose from its offerings to create their own customized MBA programs. Moreover, universities that want to start selling their own courses online will also be able to turn to Pensare to provide the needed technology. "We'd like to see 20% to 30% of MBAs granted in the U.S. on the Pensare platform within five years," Donzelli says.

That's mighty ambitious—but so far, the B-school community doesn't sound too worried. "Someday, distance learning will be a very important part of learning, but for now, it's in its infancy," says Donald Jacobs, the dean of the J.L. Kellogg Graduate School of Management. Jacobs scoffs at the notion that companies will turn to online programs for degrees.

Still, a new deal with Duke University's Fuqua School of Business—ranked No. 7 in BUSINESS WEEK's 1998 survey

of the best B-schools—could push Pensare into the leagues. The software provider will upgrade its technology behind the Duke MBA-Global Executive

AT UNISYS: Jackson hired Pensare to create an online program

to supplement his face-to-face classes. "When you want to change a culture, you want to do as much of it on your own as you can," says Jackson. Today, everyone from Unisys' senior execs to its younger fast-track stars logs on to tiny Pensare's Distinctive Leadership courses from their desktops. Customized materials were developed by Pensare and a former professor from the University of Southern California's Marshall School of Business. To go along with Jackson's seminar on leadership, for example, Pensare produced case studies and interviews with famous leaders. By yearend, about 400 Unisys managers will have taken courses through Pensare. And

although Jackson can't link Unisys' higher stock prices to the course work, "we're seeing good things happen," he says. Jackson says executives are energized and communicating better. Pensare—the name means "to think" in Italian—is just one of a handful of private sector companies making a splash in the executive education market. Founded by Chairman and CEO Douglas E. Donzelli, an entrepreneur who sold a previous startup to Novell, Inc., Pensare aims to bring the best courses from top B-schools together in one place online. Companies will then be able to pick and choose from its offerings to create their own customized MBA programs. Moreover, universities that want to start selling their own courses online will also be able to turn to Pensare to provide the needed technology. "We'd like to see 20% to 30% of MBAs granted in the U.S. on the Pensare platform within five years," Donzelli says.

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Why would Duke give up a franchise that sets it apart—and that might ultimately become a direct competitor online? According to Blair H. Shepard, Fuqua's senior associate dean for academic programs, the school didn't have the resources to expand the online program. "We've got to share the wealth to make this happen," he says. Duke—which received a significant equity stake in Pensare—will receive royalties for its courses, and could earn a large financial return if Pensare goes public next year.

Still, Pensare hardly has this lucrative arena to itself. Rival UNext.com is working with such B-schools as Columbia and the University of Chicago to create an online MBA soon. And University Access has just inked a deal with the University of North Carolina's Kenan-Flagler B-school to build a global executive MBA program for five companies.

Yet ambivalence remains as to whether sophisticated management concepts can really be taught over the Net. "I still think in-class, physical learning is optimal," says Howard S. Kaufold, director of the Wharton Executive MBA Program. But as a teacher in Wharton's own satellite-delivered courses, Kaufold knows he has no choice but to experiment.

By Mica Schneider in New York

For custom reprints of this Special Report on executive education, call 212 512-3148 (minimum order of 1,000).

Special Report

EXECUTIVE EDUCATION

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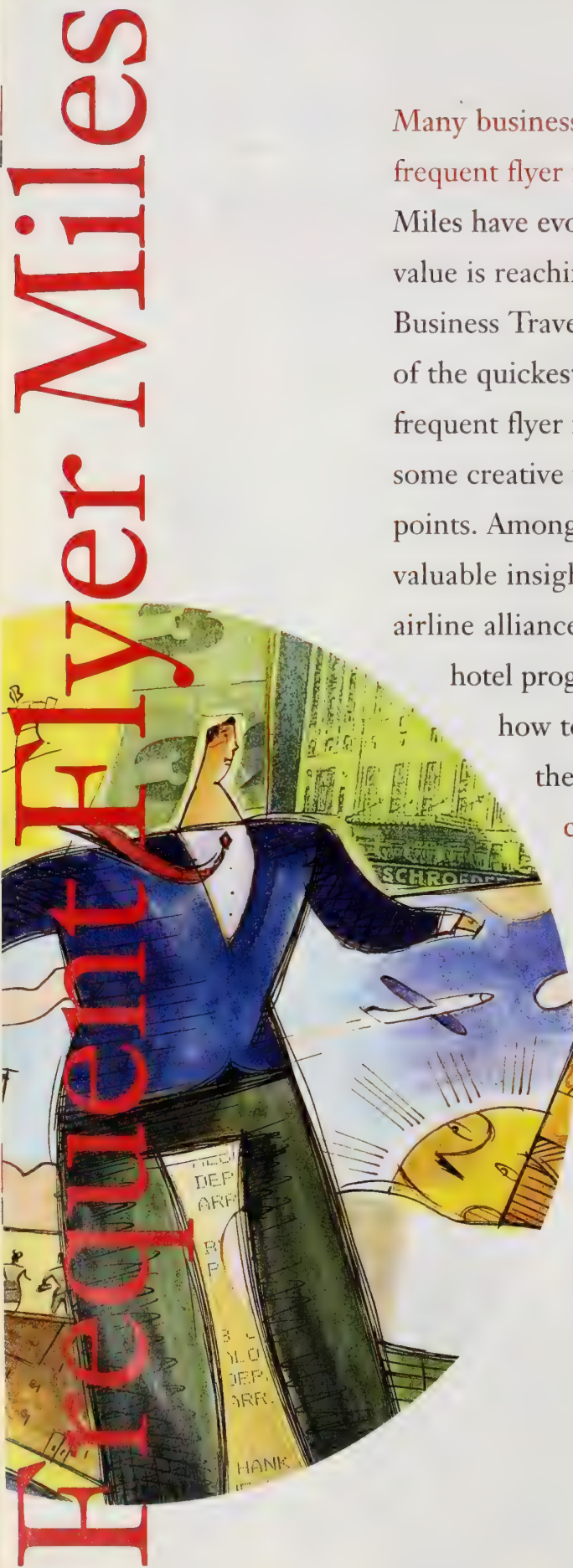
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Frequent Flyer Miles



Many business travelers are convinced that earning frequent flyer miles is like depositing money in the bank. Miles have evolved into a form of currency and their value is reaching new heights. That's why this Special Business Travel Section is devoted to showing you some of the quickest and most efficient ways to accumulate frequent flyer miles and hotel points. We've also included some creative ways to redeem those very same miles and points. Among other news that is taking off, you'll find valuable insight about mileage-earning credit cards, airline alliances, current deals from major airlines and hotel program introductions. Read on to find out how to make your miles go further and reap the rewards of the highest form of currency – **currency for high flyers.**

Turning Mortgages into Miles: Earning Miles

Turning Miles into Mountains: Redeeming Miles

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News on the Airline Alliance Frontier

Hotel News

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Turning Mortgages into Miles:

Mileage mania is enabling consumers to transform myriad purchases into a multitude of miles. Better yet, no purchase is too big or too small.



Accumulating miles is no longer reserved for individuals who travel. The proliferation of mileage-earning vehicles now includes everything from stock trades to mortgages to, yes, microwave meals – that could mean anything *and* everything from returning a call to your boss to taking in a leisurely game of golf to plunking down a deposit for that sexy sports car. Before making a purchase, find out if miles are part of the deal or if a competitive company offers miles for making a comparable purchase at a competitive price.

Here is a sampling of the increasing ways to gain miles with some of the major carriers. Terms are subject to change and, in some instances, offers are good for a limited time only. To reap the rewards, you need to be a member of the applicable programs.

United Airlines (Mileage Plus program)

Get Your Miles Here

Newcomers to booking online can now earn 4,000 Mileage Plus® bonus miles with the first purchase of a United Airlines ticket at the www.ual.com website. This includes the ongoing 1,000-mile bonus for booking online, plus an additional one-time bonus of 3,000 miles. Get boarding soon since travel must be completed by December 31, 1999.

I'll Trade You

Mileage Plus members can earn up to 25,000 bonus miles when they open an E*Trade® account with \$50,000 or more. Or, earn up to 10,000 bonus miles when opening an account with \$10,000 or more. Mileage earned varies with the amount of the account. Invest the time and visit E*Trade at www.etrade.com.

Can I Quote You?

United Airlines and e-Kemper is offering members a minimum of 200 miles when they request a free quote on their auto insurance through Kemper's new direct response division at www.ekemper.com/ual.

Northwest Airlines (WorldPerks® program)

Three Times the Fun

Earn triple WorldPerks bonus miles on qualifying Hertz rentals through October 31, 1999 at participating locations. Thanks to Hertz and Northwest Airlines, you can now drive in style and heighten your miles account – at the same time. To get into the fast lane, stop by www.hertz.com or call 1-800-654-2210.

Investing Pays

Earn 250 miles for every \$1,000 you invest for one year in the Warburg Pincus WorldPerks Money Market Fund or the Warburg Pincus WorldPerks Tax Free Money Market Fund. Invest yourself in WorldPerks Investor Miles™ at www.warburg.com or by calling 1-800-927-2874 or 1-800-WARBURG.

Flower Power

The Flower Club® is giving away 500 miles for every order of \$29.99. An additional 100 miles will be credited to your account for every \$10 over the \$29.99 minimum. Call 1-800-800-7363

and come away smelling like a rose.

Check It Out

When you travel on a Northwest E-Ticket™, earn 1,000 miles for each one-way check-in at an E-Service Center at designated U.S. airports. Among other services, you can use E-Service Centers to obtain boarding



The proliferation of mileage-earning vehicles now includes everything from stock trades to mortgages to, yes, microwave meals.

SPRINGS
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Get up to

Now

or

AT

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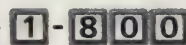
Sprint PCS
5,000 Bonus Miles



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2,000 Bonus Miles



EarthLink Sprint Internet Service
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Sprint Personal 800 Number
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Sprint Paging
2,000 Bonus Miles

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Only Sprint lets the ways you communicate add up to more WorldPerks Bonus Miles in your account. That's because each dollar you spend on any Sprint service earns you five additional miles, whether you're surfing the Internet, checking your voicemail or

calling home on your Sprint PCS Phone. It all gets you on your way that much faster to free travel on Northwest Airlines.

You'll earn up to 13,500 Bonus Miles for choosing Sprint. So get connected to your world and send your WorldPerks Bonus Miles soaring. And call today toll-free, 1-888-MILES-4-YOU.

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Sprint Sense is 10¢ a minute residential dial one state-to-state 7 pm to 7 am weekdays and all weekend, 25¢ a minute 7 am to 7 pm. In-state rates vary. Call 1-888-645-3749 for details on state rates. Offer expires 1/31/00. Excludes taxes and credits. Limit one bonus mile offer per customer. For Sprint PCS, your first 2,500 mile bonus will be deposited in your WorldPerks account up to 12 weeks after your Sprint PCS service has been activated. Your additional 2,500 mile bonus will be deposited in your WorldPerks account up to 12 weeks after your sixth Sprint PCS invoice. For Sprint Paging, your first 1,000 mile bonus will be deposited in your WorldPerks account up to 8 weeks after your Sprint Paging service has been activated. Your additional 1,000 mile bonus will be deposited in your WorldPerks account up to 8 weeks after your sixth Sprint Paging invoice. For all other services, please allow up to eight weeks for miles to be posted to your WorldPerks account. Certain restrictions apply. Call 1-888-MILES-4-YOU for details. ©1999 Sprint Spectrum, L.P. All rights reserved. Sprint, Sprint PCS, Sprint PCS Phone and the diamond logo are trademarks of Sprint Communications Company, L.P. ©1999 Northwest Airlines, Inc. is a registered trademark of Northwest Airlines. EarthLink is a trademark of EarthLink, Inc.

passes, change or confirm seat assignments and/or obtain WorldPerks Elite upgrades. Check it out by calling 1-800-225-2525.

Continental Airlines (OnePass® program)

Pay Your Way

Now you can earn miles with cash. The OnePass Purchase Option allows you to buy up to 20 percent of the miles you need for a travel award requiring a minimum of 20,000. For \$25 (plus tax), you get 1,000 miles. To get more mileage out of every dollar, call 1-800-621-7467.

American Airlines (AAdvantage® program)

Wired-less?

AAdvantage members who enroll in AT&T Wireless Services inflight calling program can earn five miles for every \$1 of inflight calling on American Airlines flights. To connect, call 1-800-682-0006 by land or *MILES by air.

Before making a purchase, find out if miles are part of the deal.

Take All the Credit

Earn miles from the AAdvantage Program for Mortgages and Real Estate. When buying or refinancing with Countrywide® Home Loans, you can earn 1,000 AAdvantage miles for every \$10,000 of your loan. Home equity loans earn you 2,500 miles. Miles vary with business conducted. So, head right home and call 1-800-852-9744 for more details.

Tee Time

The AAdvantage Golf program offers benefits at over 400 courses. Earn 2,000 miles for just enrolling (a fee is required) and a 100-mile minimum each time you play.

To find out where to take that first swing, call 1-888-843-5422.

Delta Air Lines (SkyMiles® program)

In the Driver's Seat

Buy a car from a participating SkyMiles affiliated dealership and earn up to 10,000 bonus miles as you drive off into the sunset (or smog, depending on your residence). Earn 10,000 miles with the purchase of a new car from \$20,001 to \$40,000 or any used vehicle. For new vehicles up to \$20,000, earn 5,000 bonus miles. In addition, you can earn one bonus mile for every dollar spent on service at a SkyMiles dealership and/or 10,000 bonus miles on the purchase of an extended service warranty. Get up to full speed by calling 1-888-310-3435 for a list of participating dealers.

To Top it Off

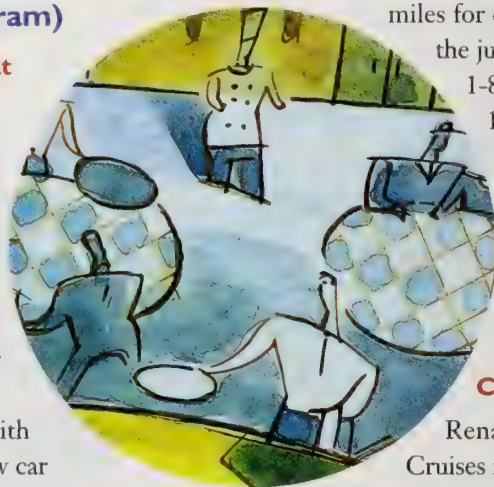
Delta's Mileage Purchase program enables you to purchase the extra miles you need to qualify for an award ticket. Depending on the award, you can purchase up to 20,000 miles, in increments of 1,000 miles, for 2½ cents per mile, plus applicable transportation taxes and fees. To cash in on this deal, call SkyMiles OneSource™ at 1-800-325-3999 or your Delta Reservations Sales Representative at the telephone number listed on the back of your SkyMiles membership card.

Eat and Earn:

With the SkyMiles Dining Program, you can earn 10 bonus miles for every qualified dollar spent, including

beverage, tax and tip, at thousands of restaurants nationwide. Earn miles on your first visit per restaurant per month with a maximum of 60,000 miles for each visit.

For the juicy details, call 1-800-213-7467 or 1-800-818-8181.



US Airway (Divide Miles program)

Cruise Con

Renaissance Cruises is offering up to 20,000 miles per cabin on designated cruises. To join in on the fun, call Renaissance Cruises at 1-800-825-7938 or visit their website at www.renaissancecruises.com.

Here's to Good Health

Receive a certificate worth 500 miles with the purchase of 10 specially marked Healthy Choice products. There's no limit to the number of certificates you can earn – so start your health kick today. Other airlines participating in the Healthy Choice promotion are American Airlines, United Airlines, Delta Air Lines, TWA and Northwest Airlines. For additional information, visit the Healthy Choice website at www.healthychoice.com.

America West (FlightFund® program)

Shorten the Distance

FlightFund members who switch to Sprint Sense® for long-distance residential service can earn up to 7,500 bonus miles. Get 500 additional bonus miles (awarded after your sixth invoice) for signing up online. In addition, you can earn five miles for every dollar spent on such

shopping, sleeping, driving, talking.

(Flying isn't the only way to earn miles.)



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offerings as Sprint long-distance, Internet, toll-free, additional line and paging services. Certain rules and restrictions apply. Keep in closer touch with family and friends by calling 1-800-968-7846 or head for www.sprint.com to check out the latest deals. Sprint also has partnerships with Alaska Airlines, Northwest Airlines, TWA and Virgin Atlantic Airways.

Diners Club International (Club Rewards program)

Key This In

Diners Club International is offering double Club Rewards points when Cardmembers purchase Dell® products by November 30, 1999. The deal applies to items like desktop and notebook computers, along with accessories. To get up and running, visit www.dinersclubus.com or call 1-800-2-DINERS.

According to OAG's Frequent Flyer magazine 1998 Frequent Flyer Poll:

- 58 percent of business travelers visited an airline website in the past 12 months
- 43 percent of business travelers said they use the Internet or an online service while traveling, up from 27 percent as revealed in the 1997 Frequent Flyer Poll
- 73 percent of business travelers said they generally travel with a laptop computer

Turning Miles into Mountains:

You've worked hard to rack up all of those miles and hotel points – now it's time to put them to good use. Beyond airline tickets and hotel stays, you can now redeem your miles for everything from Utah ski trips to Caribbean cruises.

Getting maximum value from your miles and hotel points is a primary goal for most business travelers and there's an abundance of opportunities in the redemption arena. In many instances, you can contribute to worthy causes, stay at your favorite hotels, take all-inclusive vacations to exotic lands, earn memberships to airport lounges, buy upgrades, participate in auctions, and/or shop at your favorite retail outlets. When you're ready to splurge, here are some innovative ways to spend your miles and hotel points.

Golf enthusiasts can swing Marriott Rewards® hotel points into "Great Golf Getaways," which may include resort accommodations that sport the ideal golf environment or golf lessons at some of the best schools in the country. Of course, an all-time "rewards" favorite is a complete vacation package, including a one-week stay at your favorite Marriott hotel, two (or more) roundtrip airline tickets and car rental.

Members can also use their points to set sail on sea cruises to Alaska, the Caribbean or the Greek Isles.

Another alternative is to head for Universal Studios Florida® or a ski trip in Utah.

"We have 175 different awards," says Ralph Giannola, Marriott International senior vice president of consumer marketing. "In addition to offering variety, awards need to be attainable. When it comes to redeeming points, we offer our guests a host of options, as well as quick and simple ways to reach their desired awards."



Hilton HHonors® members can transform stays into airline tickets and hotel rooms. "Our goal is to give our guests the most rewarding earning opportunities. That's why we have double-dipping – you can get *both* miles and points for every stay," says Jeffrey Diskin, President and COO of Hilton HHonors Worldwide.

Hilton HHonors VIP members can enjoy vacation award packages ranging from golf getaways to vacations in Europe and/or Hawaii. The athletic set can redeem points for custom-fitted bicycles; sweet-lovers can indulge in entire tins or baskets of Mrs. Fields® cookies; and motorists can earn new one-year basic member

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to the Internet with unprecedented levels
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ships to AAA. Members can exchange HHonors points for airlines miles and miles for points with Reward Exchange participants.

Utterly Unique

Lufthansa used their creative juices when they developed such awards as 30-minute flights in vintage Lufthansa planes from the 1930s, lessons from professional BMW race car drivers and 3-day passes for the entire family to Disneyland® Paris. You can also be "pilot for a day" as you enter a simulator where Lufthansa pilots are actually trained. Miles & More® members can also redeem their miles on any Star Alliance carrier, which literally opens up a world of possibilities.

The carrier also has ongoing drawings that range from dinner for two to luxury cruises. In one instance, travelers participated in a drawing for 100,000 miles for a one-week Caribbean cruise to St. Vincent, Grenada, Margarita Island and Curacao.

1998 through the Northwest AirCares charitable support program. These donated miles translate into approximately 2,000 to 2,550 domestic roundtrip tickets for use by the airline's charity partners. Travelers receive 500 bonus miles for contributions of at least 5,000 miles or \$50 or more.

Northwest AirCares 1998 charities included St. Jude Children's Research Hospital, Juvenile Diabetes Foundation International, The United Negro College Fund and the March of Dimes.

American Express® Membership Rewards® is well aware that shopping is one of the nation's favorite pastimes. Among other choices, the program enables you to redeem points for merchandise from The Sharper Image®, The Learning Company and Fisher-Price®. In addition, points can be redeemed for Hertz®,

Getting maximum value from your miles and hotel points is a primary goal for most business travelers.

Jim Davidovich, United Airlines marketing manager, asserts that travelers want to go the distance with their miles. "Many people are looking to go beyond the United States and earn roundtrip tickets to Europe. Overall, frequent flyers want to go to the furthest destination they can with using award tickets," adds Davidovich.

Drive Off into the Sunset

If you're in a lavish frame of mind, United conducts auctions that cover

a broad range of activities. One auction spotlighted a week-long driving tour in a Mercedes through England, France or California Wine Country. United also holds bonus auctions for short and sweet stays at any of 50 Relais & Chateaux® Inns.

Delta Air Lines is another carrier that holds auctions for its frequent flyers. Among other eventful trips, this month's auctions feature a Hyatt Lake Tahoe Escape, Radisson Seas Navigator Cruise, Best of Italy tour and a Western North Carolina Adventure Package.

To keep members abreast of other award opportunities, Delta recently introduced a toll-free number (1-888-750-6699) that travelers can call to learn about SkyMiles® award travel availability to popular destinations. "We're constantly looking for new ways to add value and variety to our program," says Kevin Pinto, Delta's system manager – SkyMiles.

Pinto is not alone in his views. Most frequent flyers would agree that value and variety play a big role in the redemption of miles and hotel points. Fortunately, travel providers continue to roll out viable – and imaginative – options.



Take Heart

Northwest Airlines' WorldPerks® members gave with their hearts when they contributed more than 51 million miles to non-profit organizations in

National®, Budget® and Avis® car rentals. You can always opt for hotel stays and/or airline tickets – always a wise choice.

ve already checked voicemail on the ground.
Whatever it is, it can wait till I land.
I'm not calling in.
What can possibly happen in a couple of hours? —



“You have
seven
new
messages.”



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We realize that for you, not checking voicemail is hard to do. Well, we're about to make it even harder: an AT&T inflight program that gives you the first minute free when you use the inflight phone to check voicemail at the office. Just call 1-800-743-8275 or dial *MAIL (toll-free) on the inflight phone for details and to register your business voicemail number. It's that easy. So on your next flight, you might as well put aside that novel, pick up the phone, and do what you really want to do. Because something tells us you'll have a few new messages.



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Take Off with these Hot Offerings:

Here are some of the best bargains and biggest innovations in the air – and on the ground.*

Good Every Time

United Airlines has eliminated the expiration of miles for Mileage Plus members. However, members must earn or redeem miles at least once every 36 months. In addition, United will reinstate miles that have expired from 1998 accounts. To re-activate miles, you must purchase two paid domestic roundtrips or one paid intercontinental roundtrip on United, United Shuttle® or United Express® by December 31, 1999. Visit www.ual.com to register for this special offer prior to take-off on your qualifying flight.

On the Big Screen

You can now enroll in United Airlines' Mileage Plus program, redeem award miles for domestic travel and obtain real-time account information online. The Internet can also be used to check award travel availability to all 50 states and Puerto Rico. In addition, United is enabling travelers to purchase up to 15,000 miles per year – up from 10,000 miles – for 2½ cents a mile (plus federal excise tax and processing fee). Order via the web through www.ualmiles.com.

The Joys of Companionship

Malaysia Airlines is offering American Express Platinum cardholders a free roundtrip companion ticket with the purchase of a full-fare, roundtrip ticket on first or business class flights to Malaysia and beyond (excluding Japan). Gold, Corporate and Green American Express cardholders making similar purchases are eligible for a 75 percent discount on a roundtrip companion ticket. This offer is valid until April 2000. Tickets are subject to all local applicable taxes and companions must fly together. Keep your companion happy by visiting your travel agent, American Express office or Malaysia Airlines at www.malaysia-airlines.com.

Less is More

Delta Air Lines is now offering a reduced mileage award for travel on the Delta Shuttle between New York's LaGuardia Marine Air Terminal and Boston and/or Washington, D.C., along with shuttle service between Boston and Washington. Valid until December 31st, the mileage require-

ment for a roundtrip ticket is 15,000 as opposed to the standard 25,000 miles. For a limited time, reduced mileage awards are also available for travel to Mexico, Japan, Central America and South America from designated gateways.

Cash Gladly Accepted

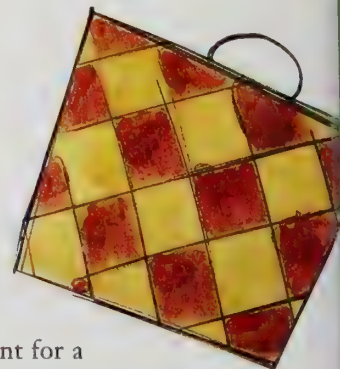
To accommodate frequent flyers who either don't have enough miles or don't want to part with a big chunk of them, American Airlines' AAdvantage members can use a combination of miles and cash to claim award tickets. For example, instead of using 25,000 miles for a domestic award ticket, you have the option of combining 10,000 miles with a designated co-payment. American Airlines has 20,000-, 15,000- and 10,000-mile award tickets requiring co-payment.

A Bigger Window

Northwest Airlines has extended its off-peak award period so now WorldPerks members can use a 20,000-mile award ticket within the continental U.S. and Canada for nine months out of the year – six months more than in the past. A Saturday night stayover is required. In addition, WorldPerks miles no longer expire.

Half-Price Sale

For a limited time, Southwest Airline is cutting in half the requirements to earn an award ticket if you book online. You can now earn an award



John Christakos

president Blu Dot design

creates his own furniture

builds his own business trips



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ticket after only four roundtrip flights, as opposed to the standard eight roundtrip flights. If you fly 50 roundtrips within a 12-month period, you are eligible for a free companion pass, good for one year.

Lucky Number Three

Between now and December 31st, earn triple miles on Midwest Express Airlines for travel between Milwaukee or Kansas City and Washington Dulles or Washington National. In addition, Frequent Flyer miles no longer expire as long as there is any type of mileage activity in a member's account within 36 months. For additional information, visit www.midwestexpress.com.

Right Online

Korean Air will be featuring its website in five languages: English, Korean, Japanese, French and German. In addition, SKYPASS members can create personalized pages featuring such information as mileage balances, special Internet fares to chosen destinations and the weather and local time at designated cities. Take a trip to www.koreanair.com.

European Vacation

Travelscape.com, a Las-Vegas-based online wholesale travel planning and reservation service, recently launched Travelscape Europe International at www.travelscapeeurope.com. You'll find discounts on hotel and air/hotel packages – from budget to luxury accommodations – at approximately 150 hotels throughout Europe.

Sleep Well

The 1-800-USA-Hotels.com website offers a 20 – 65 percent discount on the rates at over 11,000 properties worldwide. In addition, you'll earn two miles for every dollar spent* on hotel reservations. First time users who book their hotels on the Internet receive 1,000 bonus miles. Site visitors can speak directly to a representative by clicking a button after entering required information – an agent will contact them via phone to answer any questions. So, get booking around-the-clock at www.1800usahotels.com.



**You can now
convert American
Express Member-
ship Rewards
points into cash
or buy points to
help reach an
award level.**

What a Great Voice

AT&T is offering the first minute of every inflight call made to a registered business voicemail number free of charge. There is no charge for calls under one minute made to voicemail. Travelers can register business or corporate voicemail numbers in the United States and Canada by calling 1-800-743-8275 on the ground or *MAIL (toll-free) in the air. Some restrictions apply. Start talking – listen, too.

Talk is Cheap

For answering a few travel-related questions, AT&T is offering a free five-minute inflight phone call to passengers on Alaska, American, Canadian, Northwest and Southwest airlines. Dial *FREE (*3733 toll-free) from an AT&T inflight phone on one of these airlines to connect to a representative who will ask a few questions and arrange for the free call. This promotion is available on a one-time basis and calls are valid in North America only.

We Klik

Get a free trial version of PeoplePack software and save \$25 on a PeoplePack membership when you buy a four-pack of 40MB Iomega Klik!™ disk. The Iomega Klik! PC card drive, introduced last spring, is a compact drive that fits into a notebook's PC card slot. When you're ready to Klik, head over to www.iomegadirect.com where you can now purchase the full line of Iomega products online.

Give and Take

You can now convert American Express Membership Rewards® point into cash or buy points to help reach an award level. You get \$100 for 20,000 points, and you can redeem up to 60,000 points per calendar year (\$300 worth). You can buy points in increments of 1,000 for \$25, and you may purchase up to 20,000 points per calendar month. Certain rules apply. Get to the point by calling 1-800-297-3276 or 1-800-AXP-EARN.

* Please note that these offers are subject to change and may be available for a limited time only.

AFTER 30 DAYS, MOST CHARGE CARD COMPANIES GIVE YOU A WARNING.

WE GIVE YOU ANOTHER 30 DAYS.



There must be a catch, right? Actually, no. We understand that sometimes a three-day business trip turns into three weeks and, by necessity, you could use some extra time to pay your bill. That's why we always give you the convenience of an extra billing period to pay when you need it, interest-free. Another difference is having a real person answer your calls and help you, 24 hours a day. We also give you an award-winning rewards program that allows you to earn miles that can be redeemed on every major U.S. airline. And, of course, the Diners Club Card is welcomed by airlines, hotels, car rental companies and millions of other places you go. Call us at 1 800 2 DINERS. We'll answer all of your questions, no extra charge.



CITIBANK

BREAKING THE PLASTIC MOLD.

"Best Program"

YEAR AFTER YEAR ...

Now, Marriott Rewards® is

REALLY FLYING!



**TRAVELERS EARN MILES FASTER AT
OVER 1,650 MARRIOTT® HOTELS WORLDWIDE**

Nothing compares to Marriott Rewards ... always the fastest way to a free night ... and now the fastest way to a FREE FLIGHT. Starting October 4th, Marriott Rewards members can earn three miles on their choice of 28 airlines for all dollars spent at Marriott or Renaissance® hotels, resorts and suites. And for the first time ever, members can earn miles at seven other Marriott hotel brands. Of course, earning points toward free vacations is always an option!

**MORE REWARDING
THAN EVER**

✓ **Fastest Way to a Free Flight**
New mileage option triples the number of hotels. Now earn unlimited miles at 1,650 Marriott hotels worldwide.

✓ **More Airline Partners**—Now 28 participating airlines, including Cathay Pacific, LatinPass®, Singapore Airlines and Southwest Airlines.

✓ **Double Miles on American Airlines®**—Members receive double American AAdvantage® miles to six miles per dollar spent—stays October 4, 1999, through December 21, 1999.

✓ **Increased Club Marquis Bonus**
Marriott Rewards now gives elite level members up to three times more bonus points for their stays.

✓ **Club Marquis Expands to Renaissance**—Renaissance Hotels and Suites now offers exclusive Club Marquis benefits (including the increased bonus).

✓ **Online Award Redemption**—Members can redeem awards online. Update their profiles any time at marriottrewards.com.

**WE ALSO HOPE YOU
ENJOYED THIS YEAR
25K BONUS!**

SPEND LESS ... EARN MORE, WITH THE INDUSTRY'S RICHEST FREQUENT FLYER PROGRAM!

Whether it's points or miles, Marriott Rewards members spend less and earn more free travel than with other frequent traveler programs.

YOUR REWARD	SPENDING REQUIRED TO EARN AWARDS				
	Marriott Rewards	Holiday Inn Bass Priority Club	Hilton HHonors	Hyatt Gold Passport	Starwood Preferred Guest
Fastest free night	\$700	\$750	\$1,000	\$1,600	\$1,000
3 nights at a resort*	\$7,500	\$15,000	\$10,000	\$9,000	\$15,000
7 nights at a resort*	\$12,500	\$35,000	\$23,000	\$19,000	\$30,000
10,000 miles	\$3,000	\$4,000	\$5,000	\$6,000	\$5,000
Air ticket for travel within the U.S.	\$6,000	\$10,000	\$8,500	\$15,000	\$10,000

*Comparison based on full-service resort accommodations.

Marriott Rewards is proud to be the 1998 and 1997 Freddie "Best Frequent Guest Program of the Year" and Business Traveler International "Best Hotel Reward Program in the World" awards winner.

Keeping with our tradition of program excellence, Marriott Rewards promises continued program innovation to give members what they want most—award flexibility, member recognition and program simplicity.

For more information, or to join Marriott Rewards call 1-800-442-3354, or log on marriottrewards.com.



Marriott
REWARDS.

Easily the most rewarding way to travel.SM

Marriott Hotels, Resorts and Suites • Renaissance Hotels, Resorts and Suites • Courtyard[®] by Marriott • Marriott Vacation Club[®] International
Marriott Conference Centers • Fairfield Inn[®] by Marriott • Residence Inn[®] by Marriott • TownePlace Suites[®] by Marriott • SpringHill[®] Suites by Marriott

News on the Airline Alliance Frontier:

Airline alliances are enabling business travelers to earn frequent flyer miles on a multitude of airlines and put them to work on their primary carriers.



Since one airline can't possibly meet the diverse needs of today's global traveler, airline alliances are the next best thing. In most cases, airline alliances enable you to earn frequent flyer miles and put those miles toward elite status on your primary carrier when flying on an alliance airline. There often is reciprocity in the use of airport lounges and other on-the-ground services. Joint scheduling and facility coordination further enhances the life of the business traveler.

The bottom line is that frequent flyers want seamless travel experiences – no matter where in the world their travels may take them – and airlines are delivering. Star Alliance™ and oneworld™ are two of the more prominent alliances; however, new alliances continue to enter the scene. Following is an overview of some of the more recent additions to the airline alliance frontier.

Mexicana Plans to Become Newest Addition to Star Alliance

Mexicana Airlines, a major player in the Latin American market, plans to join Star Alliance next year. As the newest addition to Star Alliance, Mexicana would bring the number of

carriers associated with this prominent airline alliance to ten.

Members of the Star Alliance network, which was created in May 1997, are Air Canada, Air New Zealand, Ansett Australia, Lufthansa,

Scandinavian Airlines System (SAS), Thai Airways International, United Airlines, and Varig Brazilian Airlines. All Nippon Airways (ANA) of Japan plans to join Star Alliance this month.

Founded in 1921, Mexicana Airlines has flights to 29 cities in Mexico, 11 in the United

States, two in Canada, three in Central America, three in South America, and two in the Caribbean.

LanChile Becomes Newest Member of oneworld

Frequent flyers can expect to see Linea Aerea Nacional de Chile (LanChile) on the list of oneworld carriers with services and benefits beginning in 2000, after a formal training and integration process has been completed.

Currently, the oneworld team includes American Airlines, British Airways, Canadian Airlines, Cathay Pacific Airways and Qantas Airways. LanChile marks the eighth member of the global alliance – and the third

carrier to join since oneworld was announced in September 1998.

Finnair and Iberia also recently came on board, and both of these carriers will begin providing oneworld service and benefits later in the year.

Formed in 1929, LanChile is a privately owned airline and currently operates 120 flights a day. It serves 17 points within Chile, and operates an international network with service to 22 points in 15 countries.

AeroMexico Joins Delta and Air France in Global Alliance

AeroMexico plans to team up with Delta Air Lines and Air France in forming a new global alliance. To be established early next year, the alliance is expected to consist of airline partners with route networks worldwide.

Plans for the global alliance will incorporate a network of codeshare routes, allowing passengers to travel ship cargo to and from most locations. In addition, customers will be entitled to such services as single check-in, frequent flyer recognition and airport lounges across the network.

"We envision that all of the airlines in the group will provide the finest customer service. The three current carriers in the alliance already bring many benefits to passengers," says AeroMexico Chairman Alfonso Pasquel.

AeroMexico and Delta now codeshare flights on more than 230 daily

The bottom line is that frequent flyers want seamless travel experiences – no matter where in the world their travels may take them – and airlines are delivering.

Bangkok: Avoid waiting. Use
Star Alliance Gold Check-In.

Rio: Use Star Alliance Gold
Check-In.

London: Use Star Alliance Gold
Check-In.

Arrive Chicago.

Conduct seminar:

"LIVING WELL BY
AVOIDING STRESS"



Star Alliance Gold members get priority check-in on all eight airlines.
And these days, it seems we all want more ways to reduce the stress in our lives.

www.star-alliance.com

STAR ALLIANCE
The airline network for Earth.



flights between 12 cities in Mexico and 23 destinations in the United States. AeroMexico and Air France codeshare daily between Paris and Mexico City. Passengers traveling on codeshare flights operated by any of the three carriers are eligible to earn frequent flyer miles through either Delta's SkyMiles, Air France's Frequence Plus or AeroMexico's Club Premier programs.

AeroMexico serves 43 cities in Mexico, 36 cities in the United States and six other countries in Europe and South America.

Alitalia Plans to Join Northwest/KLM Partnership

Alitalia Italian Airlines plans to join the Northwest/KLM transatlantic joint venture. As part of their agreement, Northwest, KLM and Alitalia are making a joint application to the U.S. Department of Transportation for immunity from the U.S. antitrust laws.

Subject to government approval, the three airlines will implement initiatives in various areas: pricing and inventory management; integration of the airlines' frequent flyer programs; and design and development of information systems for yield management, reservations and other operational systems.

Alitalia serves 133 destinations in over 60 countries, offering a significant number of non-stop flights to Italy from the United States.

Since one airline can't possibly meet the diverse needs of today's global traveler, airline alliances are the next best thing.

Hotel News:

Thanks to enhancements in frequent guest programs, earning points and perks while you sleep is now a reality. Hotel chains are making major introductions in areas like point and mile programs and technology.

Hyatt Speeds Up Status Process

In the Fast Lane

To better serve its most valued customers, Hyatt Hotels recently enhanced the benefits inherent in its Gold Passport® Platinum™ tier and also reduced the eligibility requirements to achieve such status.

According to Nan Moss, Hyatt Hotels' assistant vice president of global marketing alliances and programs, "Hyatt goes beyond offering its valued customers a reward program. We're also offering an extensive benefits program with superior services and recognition components. Hyatt is extremely service-oriented, and we're always looking for new ways to better accommodate our guests."

Hyatt has two upgraded tier levels – Platinum and Diamond. Achieving Platinum status previously required 10 stays or 20 nights per calendar year; the new criteria is now 5 stays or 15 nights per calendar year. After every

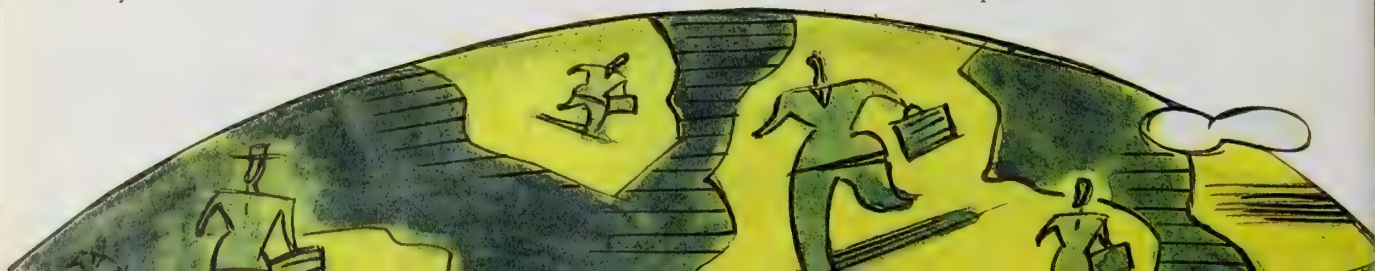
third stay in 1999, Platinum members can receive a certificate valid for a complimentary Regency Club or Business Plan Upgrade, or a complimentary amenity or discounted service to use on a future Hyatt stay. The amenity or service could come in the form of a \$10 food/beverage or laundry credit.

On the Gold Passport front, Hyatt is re-introducing its guest profile, which notes preferences like smoking/non-smoking, bed type, high/low floor, etc.

Marriott Keeps its Guests Flying

Now, More Miles Per Dollar

Marriott recently restructured its Marriott Rewards® frequent guest program, significantly boosting the number of frequent flyer miles that can be earned per stay at nine participating Marriott lodging brands. No flight is required and the over 1 million Marriott Rewards members can put their miles to good use on 28 airline partners. Members still have the option of earning hotel points in lieu of miles.



IT'S AMAZING HOW MUCH WEIGHT TWELVE POUNDS OF CRYSTAL CARRIES WITH BUSINESS TRAVELERS.



Hyatt has received the 1999 J.D. Power and Associates Award for Highest Guest Satisfaction Among Upscale Hotel Chains. What's more, we were voted the top Upscale U.S. Hotel Chain by readers of *Business Travel News*. And Hyatt Gold Passport recently won six of *Inside Flyer* magazine's prestigious Freddie Awards—more than any other hotel chain—including Best Customer Service.

So for business travel, doesn't it make sense to choose the hotel company with the best credentials? For reservations, call Hyatt or your travel planner.

1 800 233 1234 or www.hyatt.com



J.D. Power and Associates 1999 Hotel Guest Satisfaction Study®. Study based on 16,109 individual evaluations. Top upscale hotel chains were ranked in this study. Upscale excludes luxury hotel chains. www.hyatt.com. Hyatt Hotels and Resorts® encompasses hotels and resorts managed, franchised or operated by two separate groups of companies: Hyatt Corporation and its affiliates and affiliates of Hyatt International Corporation. © 1999 Hyatt.

"We are extremely customer-driven and many of our members have told us that the ability to earn miles is very important. Our new program enhancement is one more way that we're meeting the needs of our most loyal guests," said Ralph Giannola, Marriott International's senior vice president of consumer marketing.

Under the new program, guests earn three miles per dollar on all room charges (including food) when they stay at:

- Marriott® Hotels, Resorts and Suites
- Marriott® Conference Centers
- Renaissance® Hotels and Resorts
- Marriott® Vacation ClubSM International

Members earn one mile for each dollar spent (room rate only) when they visit:

- Courtyard® by Marriott
- SpringHill Suites™ by Marriott
- Residence Inn® by Marriott
- Fairfield Inn® by Marriott
- TownePlace Suites® by Marriott

Prior to this program enhancement members earned 500 miles per stay Marriott Hotels & Suites.

Great Partners/Mileage Maximizer

Here's the latest update on the partners of the major frequent travel programs. The following chart also reveals the miles required for roundtrip domestic tickets, as well as flights to Hawaii, Europe and the Caribbean.

TO USE THIS CHART select the carrier or hotel then move down or across the chart to find partners. Follow the key to determine the minimum award earned.

- ✕ Conjunctive flight is required, and, for cars, a rental must be made within 24 hours of a flight

- 500 Miles per stay or rental
- 750 Miles per stay or rental
- 1000 Miles per stay or rental
- 250 Miles per stay
- 500 Miles per night up to 7 consecutive nights per month
- ▼ 750 Miles for towers or suites, or outside U.S.
- ▼ 1000 KM (621 Miles) in Mexico
- ▼ 2.5 Miles per U.S. dollar spent
- ▼ 5 Miles per \$ spent from AT&T, MCI and Sprint
- ▼ 250 Miles per rental
- 1 Mile per dollar
- 1 Mile per dollar corporate rentals/2 Miles leisure

	HOTELS																			
	Adam's Mark	Best Western	Canino Real	Crowne Plaza	Delta Hotels	Fiesta Americana	Forum	Hilton (US)/Conrad	Holiday International	Hyatt	Inter-Continental	Keddy's	Loews	Marriott Rewards/Miles	Melia & Sol	Meridien/Forte	New Otani	Preferred	Radisson	Ramada
	Red Lion Hotels	Shangri-La	Sheraton	St. Regis	Visa (Luxury Collection)	WestCoast	Westin	Westin	Westin	Westin	Westin	Westin	Westin	Westin	Westin	Westin	Westin	Westin	Westin	Westin
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TWA																				
United																				
US Airways																				
American Express																				
Diners Club																				

Courtesy of The Flyer's Edge

♦ Awards listed reflect minimum mileage required for coach class and may be subject to seat limitations and/or blackout dates. Some award travel is offered via a partner. Most carriers allow unrestricted travel for double the mileage listed.



- Member Preferences – Check profile data including airlines, credit card and room preferences, along with address information.

Radisson Launches Customer Loyalty Program

Go for the Gold

Radisson Hotels Worldwide®, part of the Carlson Hospitality Worldwide network, has jumped on the customer loyalty bandwagon. Its Gold Points Rewards™ program enables customers to earn points based on nights stayed at any of the more than 250 Radisson locations nationwide. Guests can earn 2,000 Gold Points per stay and 5,000 bonus Gold Points for every fifth stay. Or, they can opt for 500 airline miles per stay to be used on any one of 20 airline partners. Free nights are available for as little as 20,000 points, and points can be redeemed for hotel stays, travel and other merchandise.

Guests who reach Preferred Member status reap additional privileges and rewards like earning 10,000 bonus points with every fifth stay.

Program partners include MCI WorldCom™, SkyMall® and Make-A-Wish Foundations®. Gold Points can also be earned and redeemed at any Carlson Hospitality Worldwide establishment, including Country Inns & Suites By Carlson® and T.G.I. Friday's®.

Starwood Sets New Standards in Frequency Programs

A Star is Born

Guests at Starwood Hotels & Resorts Worldwide, Inc. can take advantage of the Starwood Preferred Guest™ frequency program, which boasts no blackout or expiration dates, instant rewards and online redemption.

Replacing its two previous programs (Sheraton Club International and Westin Premier), the Starwood Preferred Guest initiative enables members to earn a minimum of two Starpoints™ for every U.S. dollar spent. Each Starpoint converts to one airline mile with most major carriers.

At any one time, you can transfer a minimum of 2,000 Starpoints – or more. In addition to earning miles, Starpoints can be redeemed for hotel stays, gift certificates and merchandise from a variety of participating retailers. Members can participate in one of three tiers – Preferred Guest™, Gold Preferred™ and Platinum Preferred™, with eligibility based on number of stays per year. For example,

members who qualify for Gold Preferred status get three Starpoints per eligible dollar, instant room upgrades when available and late checkout privileges.

Starwood Hotels & Resorts Worldwide unites Westin Hotels & Resorts, Sheraton Hotels & Resorts, St. Regis, The Luxury Collection® Four Points® Hotels by Sheraton, Caesars, and W Hotels™.

CAIS Offers New High-Tech Solutions

Getting Up to Full Speed

CAIS Internet recently acquired Atcom, Inc. (now CAIS Software Solutions) and Business Anywhere USA, Inc. The Washington, D.C.-based high-speed Internet company helps hospitality chains get “wired” for the Internet and develop interactive marketing and content opportunities.

Hotel chains are making major introductions in areas like point and mile programs.

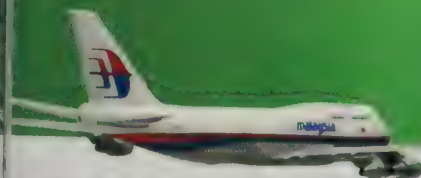
Essentially, CAIS helps business travelers turn guest rooms into satellite offices and meeting rooms into interactive online forums. Business travelers can utilize CAIS's 24/7 automated and self-operated business

center services with kiosk solutions in lobbies or other common areas in hotels worldwide.

CAIS Internet at www.cais.com is the standardized solution for Hilton Hotels and can also be found at many Marriott, Embassy Suites, Doubletree, Radisson, Crown Plaza Regal and Wyndham Hotels and Resorts locations.

Such chains as Hyatt and Starwood are currently testing CAIS's high-speed Internet connection in design guest and meeting rooms.

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AND AWAKEN YOUR SENSES.



From the minute you step on board to the moment you arrive at your destination, our goal at Malaysia Airlines is to soothe your senses. It's a dedication that's won our first and Business Class services the most prestigious industry awards year after year. Fly aboard our B777 SuperRangers™ and

B747-400s direct to Kuala Lumpur from Los Angeles via Tokyo or Taipei, or from Newark via Dubai. And continue on to any of our more than 110 destinations worldwide. Either way, you'll arrive rested and ready to spread your wings. For more information, call Malaysia Airlines at (800) 552-9264.

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Credit Card News:

It's in the Cards

Citibank and American Create Product for Small Business Owners

Serving the needs of small business owners, Citibank and American Airlines have teamed up to create The Citibank Platinum Select™ AAdvantage® Business Card. Earn one AAdvantage mile for every dollar spent, with a maximum earning potential of 150,000 miles per calendar year. Cardholders also qualify for discounts on computer equipment, automobile rentals and hotel stays. Small business owners can get up to nine additional cards for their employees with all miles accruing to the owner. Get down to business by calling 1-888-66-APPLY.

Delta and American Express Rollout Platinum Card

American Express and Delta Air Lines have joined forces to create a Platinum Delta SkyMiles® co-branded credit card which enables new members to earn up to 10,000 bonus SkyMiles, plus 5,000 base miles, upon using the card for the first time. Among other benefits, cardholders are provided with double miles on Delta purchases and a free companion certificate each year upon renewal. Get charged up by calling 1-800-SKYMILE.

Chase and Continental Issue Premiere Debit Card

Continental Airlines and The Chase Manhattan Bank now offer a co-branded debit card, where consumers can earn frequent flyer miles with every purchase. The Chase/Continental Banking Card, which carries a \$30 annual fee, offers one Continental

OnePass® mile for every two dollars spent on purchases. Bonus miles are given upon signing up for the card, and miles do not expire. For more information on a card you can bank on, call 1-800-CHASE24.

Click for Miles: ClickRewards™ Goes the Extra Mile



Increasing sophistication in Internet technology has made way for yet another mileage-earning vehicle. Launched last spring, ClickRewards at www.clickrewards.com is offering its rapidly-approaching two million members – up from about 300,000 members a year ago – an opportunity to earn ClickMiles™ when making online purchases from approximately 60 shopping sites. The company is always looking for new ways for customers to earn miles, with online grocery services one area that is currently being explored. Each purchase entitles you to a designated number of ClickMiles, and special bonuses are offered on an ongoing basis.

One ClickMile gets you one mile, which can be used toward travel on nine major airlines. ClickMiles can also be redeemed for a variety of merchandise ranging from digital cameras to CDs. Membership is free, but you must belong to the applicable frequent flyer program to transfer miles.

ClickRewards is one of several programs created by Netcentives, Inc., a developer of online promotions, direct-marketing and loyalty programs to drive electronic commerce.

The strategy behind ClickRewards is ideal for the business traveler, who is focused on both new technology

and on earning miles. “The demographics of the early adopters of electronic commerce share the same demographics as the frequent flyer,” says Perry Maynard, Netcentives’ president of relationship marketing who previously helped develop programs for Continental and Hilton. “Business travelers tend to be upscale and have greater disposable income than the general public – and they advocate new technology. It’s a perfect fit. Here was one of the earliest groups to engage in electronic commerce and, at the same time, an audience already highly motivated by frequent flyer currency.”

Specials are an integral component in the marketing mix, and Maynard is planning a holiday promotion where, among other activities, a different



Win 100,000 ClickMiles™

It Could Be You

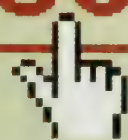
The folks at ClickRewards™ want to hear all about the funniest experience you’ve ever had on any given flight. We’re so eager to find out, that we’re willing to part with 100,000 ClickMiles for the funniest scenario.

It's simple to enter

- Just visit our website at www.clickrewards.com/100K to submit your answer in 100 words or less. Answers must be submitted by Monday, November 15th to enter.
- The winner will be notified on November 15th. The winning entry will be featured on the ClickRewards site found at www.clickrewards.com during the week of November 22nd.

We’re sure there must have been at least one inflight experience that made you chuckle! And, we want to hear all about it...

Dad buys oversize suitcase to fly kids free.



www.clickrewards.com

It's the greatest thing since, well, the luggage carousel. When you join ClickRewards™ and buy something online—say, from one of the top sites highlighted below—you get ClickMiles™. Which you can add to your frequent flyer mileage account on nine major airlines (they're redeemable on a 1 for 1 basis). Or trade them in for hotel stays, car rentals, and valuable merchandise. Need a push? You'll get 500 bonus miles with your first purchase. So join, shop, earn miles today at www.clickrewards.com/bw

 **clickrewards™**
it all adds up™

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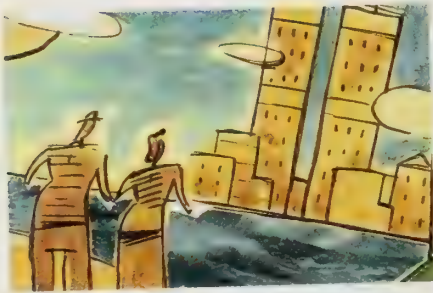
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retailer will spotlight a special promotion each week. One week, for example, cooking.com might be offering double miles with any purchase; the following week, kbbkids.com might be giving out bonus miles with the purchase of a specific item. The festivities will also include a contest where winners will come away with ClickMiles. "Promotions," adds Maynard, "are a great way to showcase our shopping partners, and we're always looking for innovative ways to introduce potential customers to all that we have to offer."

One of the next steps for ClickRewards is to send members e-mail messages of promotions and offers that target their particular interests. Information is gathered from various surveys where customers note their preferences. If a music promotion was being rolled out, details would be sent to individuals who had expressed an interest in music. "It's crucial that all your communication is relevant," states Maynard.

Airlines participating in the ClickRewards program are America West, American Airlines, British Airways, Continental Airlines, Delta Air Lines, Northwest Airlines, TWA, United Airlines, and US Airways. ClickMiles can be transferred in units of 500 and above, and they can also be redeemed for merchandise.

Author: Annette Racond is a business travel expert and former Managing Editor of *Frequent Flyer* magazine.

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Fly on Lufthansa or our Star Alliance partner United Airlines and you can accrue or redeem miles in either Lufthansa Miles & More[®] or United Mileage Plus[®], in accordance with the terms and conditions of the programs. Lufthansa Miles & More members can earn up to 1,000 bonus miles when they purchase tickets on our website.



STAR ALLIANCE[®]
The airline network for Earth[®]



Lufthansa

The global airline from Germany

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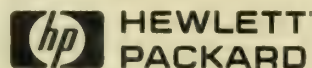
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NEIL GROSS

C TUNER THAT VES CABLE DEMS IN THE DUST

AMERICAN BROADCASTERS have been airing digital high-definition television programs almost a year now. But American homes have lagged on widescreen TVs that can display HDTV in its glory. That means premium radio frequency that the Federal Communications Commission allotted to broadcasters for HDTV isn't being utilized.

Privately held Geocast Networks Inc. of Menlo Park, Calif., wants to give TV consumers some other options at that frequency, which translates to a hefty 20 megabits-per-second (MPBS) of total bandwidth. A portion of that spectrum could be dedicated as a fat Internet pipe for personal computers, says Geocast CEO H. Josephowitz. The company has developed a special tuner that tucks into the back of a PC and delivers download speeds ranging upwards of 6 MPBS—much faster than cable modems in most settings. Last week, Geocast signed up its first broadcast partner, Hearst-ABC Television Inc., which has 26 network-affiliated TV stations nationwide.

Geocast tuners won't be able to provide full Web browsing, E-mail, or other on-demand interactive services. That, PC users will still require a separate Internet service provider. But by tagging preferences on a local browser developed by Netscape Communications, users who have joined Geocast will get fast downloads of music, sports, weather, news, and movies, customized on the model of Yahoo! Inc.'s "My Yahoo" service. The tuners, due in late 1997, will probably cost about \$100. But the service itself, an advertising-supported subscription, will be free. □



MAKING THOSE OLD SNAPSHOTS LOOK NEW AGAIN

COLOR PICTURES SHOW THEIR age, as anyone with a shoebox full of old prints can tell you. Using scanners, image-conscious digerati can load these pictures into a computer and touch them up with tools such as Adobe Photoshop. But even for a whiz in Photoshop, a mountain of pictures makes a daunting project.

Applied Science Fiction, a digital imaging startup in Austin, Tex., says it has a simpler solution, called Digital ROC, for "reconstruction of color." It's a program that photo-equipment manufacturers can install in scanners, enabling them to analyze the red, green, and blue layers

of a photo, find buried clues about the original color, and display the results on a computer screen.

Digital ROC is the latest in a suite of ASF products aimed at scanner and copier makers. The first in the suite, called Digital ICE (image correction and enhancement), zaps dust, scratches, and fingerprints from both surfaces of scanned slides without changing the underlying image. Eastman Kodak Co. and Nikon Corp. have designed ICE into high-end scanners aimed at professional design studios and photo labs. But with hundreds of billions of images now stored in photo agencies, file cabinets, and shoe boxes, there may also be a huge consumer market. □

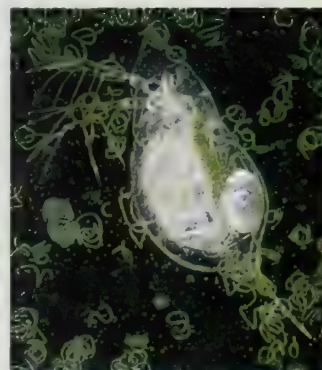
WINDSHIELDS YOU CAN DARKEN AT WILL

EVER WISH YOU COULD FLICK A SWITCH THAT WOULD DARKEN the windshield of your car? Research Frontiers Inc. in Woodbury, N. Y., claims it is a step closer to making that happen. For three decades, founder and President Robert L. Saxe has been tinkering with particles in emulsions for glass coatings that can be switched electronically from clear to dark and back again in seconds. This summer, Saxe licensed giants Hitachi Chemical Co. and Dai Nippon Ink & Chemicals Inc. to manufacture the magic emulsions that are needed to make this trick possible. General Electric, Material Sciences, Vision-Ease, and other companies have also taken licenses with Research Frontiers.

Versatile windshields are just one application. Used in convertible sunglasses, Research Frontiers' technology would outshine today's "photochromic" glasses. Users would be able to customize how dark the glass turns and instantly switch off the shades indoors. In office buildings, the glass could eliminate the need for blinds. The company reckons that the market for new architectural and automotive glass is about 20 billion square feet a year. "If our licensees got even 1% of that, we could earn \$100 million to \$200 million in license fees," says Vice-President Joseph M. Harary. □

INNOVATIONS

■ Evolution doesn't have to be a multimillion year proposition. In the Sept. 30 issue of *Nature*, biologists at Cornell University and Germany's Max Planck Institutes document the rapid evolution of tiny crustaceans called *Daphnia* (picture) in Germany's Lake Constance. In less than 30 years, these critters have acquired the ability to feed comfortably on a toxic blue-



green algae that have proliferated because of phosphorous pollution in the lake. The study is likely to encourage scientists seeking to harness fast evolution as a weapon in bioremediation.

■ Certain enzymes scavenge naturally ionized forms of oxygen known as "free radicals," which are implicated in cancer, arthritis, and other diseases. But these enzymes are expensive to produce and can trigger unwanted immune reactions. So scientists at MetaPhore Pharmaceuticals in St. Louis have created a "synzyme," an analog of natural enzymes that is based on the metal manganese. The synzyme reduced tissue damage in rats with blocked arteries, according to a report in the Oct. 8 issue of *Science*. ■ Monsanto Company said this week that it may be possible to grow environmentally friendly plastics in gene-altered forms of oilseed rape and other plants. The results should be less costly than green plastics made by bio-engineered bacteria.

CHAINSAW

He anointed himself America's
best CEO. But
AL DUNLAP drove
Sunbeam into
the ground

BY JOHN A. BYRNE

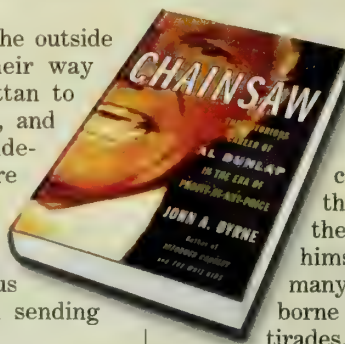
Early on the morning of June 13, 1998, the outside directors of Sunbeam Corp. made their way through the empty streets of Manhattan to Rockefeller Center. It was a Saturday, and angry thunderstorms drenched the sidewalks, as if the gods of Wall Street were outraged that the directors would dare meet secretly, behind the broad back of the company's celebrated chief executive, Albert J. Dunlap. After all, he was the no-nonsense executive famous for turning around struggling companies—and sending their shares soaring in the process.

On this dreary day, the four board members assembled at 8 a.m. in the tenth-floor law offices of Howard Kristol, Dunlap's longtime personal attorney and a Sunbeam director. Another was patched in by phone from Captiva Island, Fla.

Of the five board members, four had been chosen by Dunlap himself. They took

their seats in the same conference room they had occupied only four days earlier when Dunlap had stunned them by suggesting that he and Chief Financial Officer Russell A. Kersh were ready to quit if the directors refused to support them. Under questioning, Kersh had conceded that second-quarter sales were "a little soft."

"As you know," Director Peter Langerman began solemnly, "we've been talking for the last few days about our grave concerns over the company and the



meeting with Al and Russ last Tuesday. Langerman then asked David Fannin, an earnest, Kentucky-born lawyer who served as Sunbeam's general counsel, to brief the board. Fannin initially had welcomed the resolve Dunlap had brought to the troubled company 23 months earlier. But the stress of working for a man who styled himself "Rambo in Pinstripes" showed. Like many of his colleagues, Fannin had frequently borne the full force of the chief executive's angry tirades, which could reach the point of emotional abuse. Fannin and other Sunbeam managers believed that Dunlap's rages took him to within a hair's breadth of actual violence. As Fannin began to speak, there was a quiver in his voice and a persistent twitch in his face, a quirk that had become particularly bothersome in recent months as Fannin had quietly begun to oppose and even to despise Sunbeam's mercurial CEO.

"The day-to-day atmosphere at the company has really deteriorated," he told the board. "Al is no longer in touch with the business and what's going on at the company.... Al isn't talking to people. He has cut himself off."

A WAY OUT? Worse, the directors believed that Dunlap was hiding the true condition of the company. Fannin told the directors of a meeting on June 4 in which one of Sunbeam's top operating executives warned Dunlap and Kersh in a written memo that the company was facing an \$80.9 million gap in second-quarter revenue. When asked by a director about the condition of the company just five days later, Kersh

Book Excerpt

This adaptation is from the forthcoming HarperBusiness book *Chainsaw: The Notorious Career of Al Dunlap in the Era of Profit-at-Any-Price*, written by BUSINESS WEEK Senior Writer John A. Byrne.

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merely said that sales were soft. A shortfall of that size, however, would wipe out the 5¢ to 10¢ per share profit that Dunlap had promised the board and Wall Street only weeks earlier and could well force the appliance company into the red for the second quarter in a row.

"The numbers aren't soft," said Fannin. "They are horrible."

(In his statement,* Dunlap said he did not learn of the shortfall in sales until June 13, the day he was fired. Kersh said in his statement that any suggestion that either he or Dunlap withheld information on the company's deteriorating sales position was without merit and that he, too, did not learn of the company's lagging sales until after he was dismissed.)

Fannin's news outraged Dunlap's boardroom friends, who suspected that Dunlap and Kersh knew the company was in trouble and simply wanted to skip and run.

"They were looking for a way out," Langerman told his fellow directors. "They were giving us the bait the other day, hoping that we would take it. That would have let them off. Al could say, 'I did my best. I succeeded, and this board decided it didn't want me.'"

AGHAST. By 10 a.m., Dunlap's handpicked board concluded that the CEO had to go. But there was a problem. Dunlap was scheduled to leave his home in Boca Raton by 3 p.m. to catch a flight to London to promote the paperback edition of his book, *Mean Business*. It didn't leave much time. Kristol suggested waiting until Thursday when Dunlap would return. Having a few extra days would give the board time to prepare legally for the firing, to consider who would succeed Dunlap, and to communicate the news inside and outside the company.

Fannin was aghast, terrified that word of his meeting with the board would leak out and Dunlap would retaliate.

"I cannot work for that man another day," he said, his voice wobbly with emotion. "I can't do it."

"Don't go into the office," advised one director. "Just call in sick."

"He'll call me. He'll know that this meeting took place," said Fannin. "I just can't do it."

The general counsel broke down and abruptly left the room. After a sleepless night and nearly two years of work under Dunlap, he was utterly depleted.

Ultimately, the five directors agreed and arranged a care-

fully scripted conference call with Dunlap and Kersh mid-afternoon. At about 2:20, Langerman began slowly reading from a prepared text.

"Al," he said, "the outside directors... have decided that your departure from the company is necessary." On a

droned, careful not to stray from the script, as he drew to

close the turbulent reign of Al Dunlap at Sunbeam. "The resolutions have been adopted," concluded Langerman. "Al, whom would we like our lawyers to call to discuss your contract?"

Dunlap was fired. The mood in the room was quiet and sober as the board began methodically contacting Sunbeam's operating executives to report Dunlap's dismissal. With each phone call, however, the anxiety level rose. For one thing, the estimate of the second-quarter shortfall grew from \$80.9 million to \$200 million.

But the biggest jolt occurred when Langerman reached Treasurer Ronald Richter, who had joined the company four months earlier. The shortfall, though Richter, could pose problems with creditors. He began to mention the word covenants, the requirements that lenders impose to protect their loans.



BREAKING POINT

"I cannot work for that man another day," Fannin said, his voice wobbly with emotion. "I can't do it." The general counsel broke down and abruptly left the boardroom... utterly depleted.

"We might not make the covenants," Richter said.

"I can't believe this," said Langerman. "We could default." A hush fell over the boardroom. Everyone in the room realized they weren't simply dealing with another down quarter. It was possible, Richter conceded, that within two weeks the company's banks could call in a recently extended \$1.7 billion loan, forcing the company into bankruptcy.

When Langerman later reached Sunbeam Controller

***EDITOR'S NOTE:** Chainsaw is based on interviews with more than 250 insiders, including Sunbeam executives, managers and directors, Wall Street analysts and investors, and others. It was through their cooperation that Byrne reconstructed scenes and dialogue. In doing so, the author interviewed as many participants as possible to make the scenes as accurate as memory might allow. In some cases, sources wrote out line-by-line accounts of conversations as they recalled them. Dunlap and Russell Kersh declined to be interviewed by Byrne but released statements to the press in July, 1998. Other submitted statements to *BUSINESS WEEK*. Parts of their comments have been included.



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Robert Gluck in Florida, yet another alarm sounded.

"What are we using for cash these days?" asked Finn Fogg, Sunbeam's outside counsel from Skadden, Arps.

"What?" asked Gluck.

"What are we using for cash?"

"Well, there's the revolver," replied the controller.

Langerman, standing by the credenza for the speaker-phone call, slumped into a chair in horror.

"You are meeting the payroll with revolving credit?" asked Fogg, incredulous.

It was a profound revelation. Dunlap, the man who pro-

WRITING INVOICES

The computers were down for months after Sunbeam tried to upgrade them—with no backup system. It was forced to bill such customers as Wal-Mart and Sears manually

claimed himself the best chief executive in America, had driven the appliance maker into the ground.

BULLETPROOF VEST. Not even Dunlap's harshest critics could have predicted such a disastrous outcome when the chief executive first strode into Sunbeam. The day after Sunbeam announced that it had snared the self-styled turnaround artist and downsizing champion as its CEO, the company's shares soared nearly 60%, to \$18.63, as one analyst after another urged investors to load up on the stock. After all, at Scott Paper Co., Dunlap's last CEO assignment, he had driven up shares by 225% in 18 months, increasing the company's market value by \$6.3 billion.

Sunbeam investors knew that Dunlap's arrival meant that tough medicine would soon be administered. And at precisely 9 a.m. on Monday, July 22, 1996, when Dunlap marched into the penthouse boardroom at Sunbeam headquarters in Fort Lauderdale, the anxious group of executives gathered around the table knew it, too. Dunlap wasted no time on introductions. Like George C. Scott in the movie *Patton*, he began by delivering a spellbinding, if sometimes disjointed, monologue on himself and the company.

"You guys are responsible for the demise of Sunbeam!" Dunlap roared, tossing his glasses onto the table. "I'm here to

tell you that things have changed. The old Sunbeam is over today. It's over!"

Dunlap, the men later observed, looked exactly as he did in the photographs that accompanied the fawning magazine profiles many had read over the weekend. He wore his stripes like a military uniform, meticulously pressed, with a single wrinkle or stray thread, and perfectly fitted to his stocky frame. A white handkerchief peeked out of the breast pocket of his dark blue suit. On his left hand, he sported a chunky West Point class ring above his wedding band.

"The old Sunbeam is over," Dunlap thundered again and again. His chest was puffed out and his face flushed. The men stared in silence at this performance. Some said later that they almost expected Dunlap, like Patton, to slap someone out of frustration.

"This is the best day of your life if you're good at what you do and willing to accept change," Dunlap continued. "And this is the worst day of your life if you're not."

Once his monologue was through, Dunlap tossed off quotations and comments like so many hand grenades. After noting that Sunbeam had missed five consecutive quarters of profit and revenue estimates, he turned to Paul O'Hara, the company's chief financial officer, who would soon be replaced by Kersh. "And you delivered these numbers," Dunlap shouted.

"How could you in good conscience have done this?" Dunlap asked. "How could you have supported these forecasts?" O'Hara did not dare to attempt a response.

The men gathered around the conference table were stunned by Dunlap's attack. "It was like a car barking at you for hours," recalled Richard L. Bolton, president of the household-products division. "He just yelled, ranted, and raved. He was condescending, belligerent, and disrespectful."

As if that first meeting weren't enough, there were soon other signs that Sunbeam had entered a new era. Human resources chief James Wilson recalls being thunderstruck when he saw Dunlap's first expense report and saw that his boss had charged off a bulletproof vest. "I knew it was a different world," Wilson says. Later, Wilson added, Dunlap would expense a handgun for himself. Almost everywhere he went, Dunlap



lap was shadowed by a company-paid bodyguard.

NEAR CHAOS. Just as he had promised, Dunlap lost no time in burying the old Sunbeam. Three days into the job, he held a telephone conference with several hundred analysts, investors, and business reporters. Eager to show how quickly he could move, Dunlap spoke as if he had all the company's problems diagnosed. He told the analysts that if he were a Sunbeam shareholder, he would have "hung" former man-

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ment. He pledged a "massive and swift restructuring" to turn the company around in less than a year. "We've got too many people, too many products, too many facilities, and too many headquarters," Dunlap proclaimed.

That battle cry was one Dunlap had repeated many times. In each of the companies he had "rescued"—American Can, Lily Tulip, Crown Zellerbach, Scott—Dunlap had started by decrying the waste and inefficiency of previous management. Then he had brought in C. Donald Burnett, a senior partner at Coopers & Lybrand, to work out the details of the vast payroll cuts and plant closings that were Dunlap's signature.

Sunbeam was no exception. Within a week, Burnett and his troops were crawling all over the company. Eventually, a dozen consultants worked at company headquarters. Another dozen worked in the field, visiting Sunbeam's factories, warehouses, and sales offices, interviewing managers and compiling facts.

Still, many managers believed that the consultants' job was not to figure out how much to cut but simply to find enough bodies to meet Dunlap's preset goals. Once, when the Coopers team came back with estimates of layoffs that didn't meet Dunlap's expectations, Sunbeam managers heard the CEO quip that Burnett was "getting weak-kneed in his old age." (A statement from Coopers and Burnett said "what dictated the size of the layoffs was Mr. Dunlap's desire to downsize only once and to then get on with running the company.")

Burnett's restructuring plan, approved by the board on Nov. 12, 1996, turned Sunbeam upside down and inside out. It called for the elimination of half of the company's 6,000 employees and 87% of its products. According to Sunbeam managers, it also resulted in near-total chaos.

In almost every case, numerous executives said, the restructuring plan cut not merely fat but muscle, leaving shortages of skilled and experienced talent throughout the corporation. In human resources, for example, the Coopers plan cut the staff from 75 to 17. In meetings with Jack Bonini, one of the lead consultants under Burnett, HR chief Wilson was assured that he'd be left with a staff of 28 or 30. The first time Coopers informed him of the lower number was during its presentation to Dunlap.

After the meeting, Wilson sought out Bonini to protest.

"This makes no sense," Wilson complained. "I can't manage a function that goes from 75 to 17."

"Jim," Bonini replied calmly, "it's all ratio. Most people have maybe one [HR manager] per hundred employees. We're going to give you one for every 300. That's the way the ratio works."

(In a statement, Bonini said, "I don't recall any such conversation or the alleged circumstances of it." Coopers and Burnett said the restructuring plan was developed after consultation with managers. "Department managers agreed with the requirements developed for required staffing levels and skill sets," their letter said.)

With managers and employees being fired every day, Sunbeam execs said that most departments and functions lacked

the people to get a normal day's work done. Plants were needed to produce goods already promised to retail were being shut down. Computers no longer worked. So surviving factories lacked the parts inventory to make the products. "There weren't enough people to execute stuff," said Paula Etchison, a Sunbeam veteran who headed up business development. "The budgets kept getting reduced. Everything was starved of resources. It was a disaster."

In some cases, Sunbeam execs said, the drive to downsize led to additional costs. For example, the consultants assumed that Sunbeam could operate with a flexible workforce that would allow it to cut production of seasonal products such as electric blankets and grills during the off-season and ramp up production when the products were needed. But Coopers and Burnett said the cutbacks made sense. "Several Sunbeam manufacturing plants had been utilizing flexible workforces for some time," their letter said. "We recommend that policy be continued.")

DEAD COMPUTERS. Coopers also urged Sunbeam to fire computer staff and outsource the entire information processing function. Dunlap axed technicians making \$35,000 a year who quickly discovered they were worth \$125,000 a year

elsewhere. To replace them, according to Donald Uzzi, executive vice president for worldwide consumer products, Dunlap had to hire contract workers at far higher rates, some of whom were people he had just let go. (Coopers and Burnett said the consultants recommended outsourcing of selected functions. "In a previous company restructuring, Sunbeam's management had successfully outsourced the IT function. They therefore decided that this approach also would be effective at Sunbeam.")

In the midst of all this, the company attempted to upgrade its computer systems, with no backup. The result: The computers were down for months. Sunbeam was forced to manually invoice customers such as Wal-Mart and Sears Roebuck.

"We couldn't bill our customers," said Uzzi. "We couldn't keep track of our shipments. We didn't know what we were shipping. We had

customers calling day and night, asking where their orders were. Some had three orders instead of one. Others had the wrong order. Our customers were irate."

By early 1997, the stress pushed Sunbeam's managers most to the breaking point. Working on the front lines of a company run by Chainsaw Al, as he was known, was like trench warfare. The pressure was brutal, the hours exhausting, and the casualties high. Dunlap had imposed such unrealistic goals on the company that most Sunbeam managers believed he was engaged in a short-term exercise to pretty up the business for a quick sale. Indeed, Fannin and other senior executives said they frequently heard Dunlap berating Morgan Stanley Dean Witter investment banker William Stronach, who had been working with Dunlap since April, 1997, for finding a buyer. "Goddamn it, look what you've got here

" Budgets kept getting reduced. Everything was starved of resources. It was a disaster "

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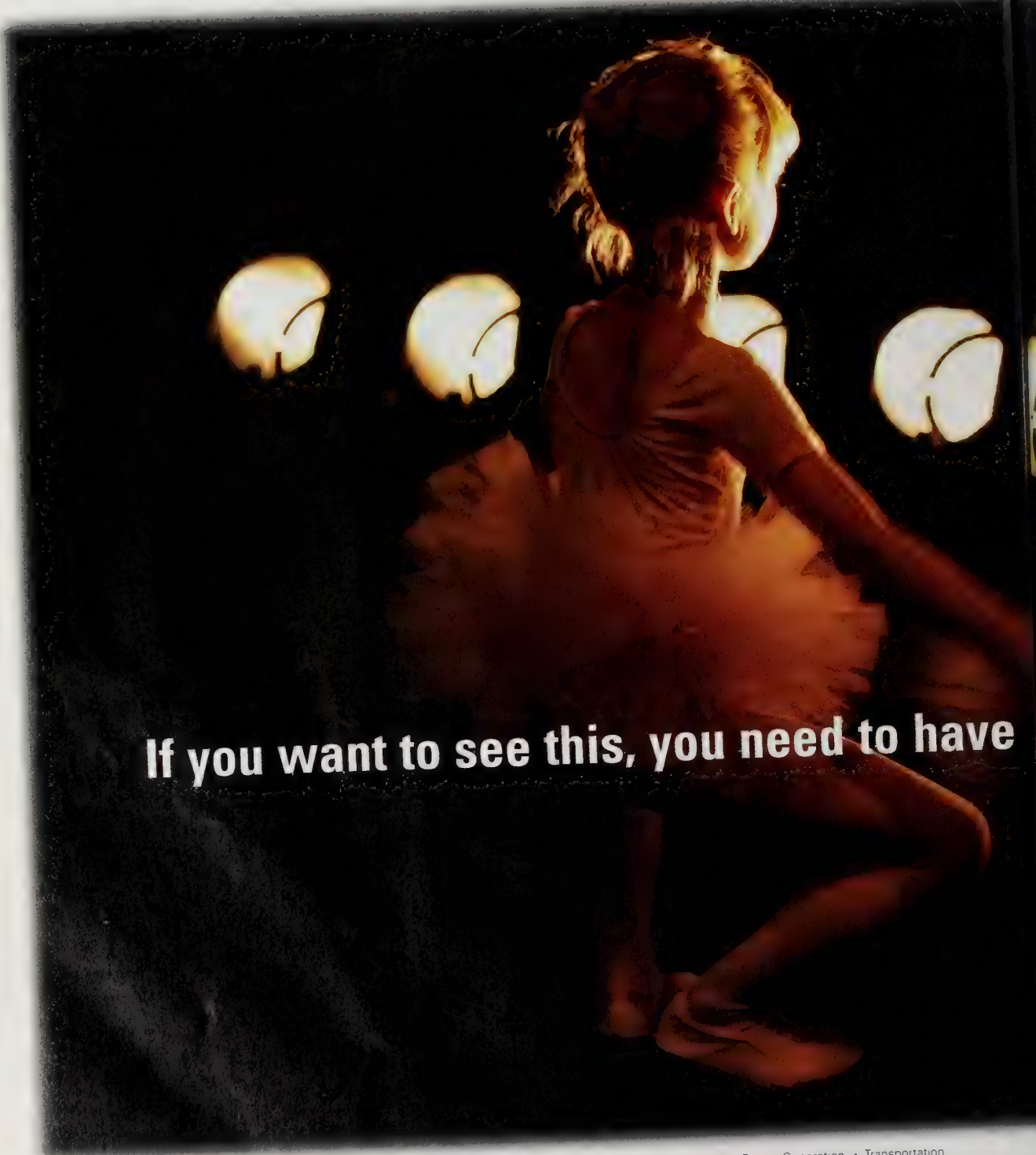


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Dunlap said. "You've got a turned-around company. Anybody could sell this."

But selling Sunbeam would not be so easy. For one thing, Dunlap's celebrity had helped push the stock to premium levels, making it too rich for most acquirers. For another, it was becoming increasingly difficult to meet Dunlap's projections. To double revenues to \$2 billion by 1999, Sunbeam would have to increase sales five times faster than rivals. To boost operating margins to 20% in just over a year, Sunbeam would have to improve its profitability more than twelvefold from the measly 2.5% margins it had. To generate \$600 million in sales through new products by 1999, the company would have to smash home runs with every at-bat.

Almost all his executives believed these goals were impractical. Dunlap, however, refused to acknowledge the near-impossibility of meeting them. Instead, he began putting excruciating pressure on those who reported to him, who in turn passed that intimidation down the line. People were told that either they meet their goals or another person would be found to do it for them. Their livelihood hung on making numbers that were not makeable.

In Dunlap's presence, knees trembled and stomachs churned. Underlings feared the torrential harangue that Dunlap could unleash at any moment. At his worst, he became viciously profane, even violent.

Executives said he would throw papers or furniture, bang his hands on his desk, and shout so ferociously that a manager's hair would be blown back by the stream of air that rushed from Dunlap's mouth. "Hair spray day" became a code phrase among execs, signifying a potential tantrum.

Many of his executives believed that Dunlap didn't care about the details of the business. "In a meeting with Al, you are not there to tell him anything," said William Kirkpatrick, an operating manager who worked with Dunlap at both Scott and Sunbeam. "You are there to listen. If you didn't hit your numbers, he would tear all over you."

Sunbeam managers had more than just their jobs at stake. Dunlap had handed out huge stock option grants soon after arriving. The top 250 to 300 executives and managers at Sunbeam received option grants that were typically twice the size of what they might get at other companies. All were aware of what such grants had meant for managers at Scott, many of whom walked away with millions. But the Sunbeam options vested over a three-year period. For many, getting fired could mean losing out on more than \$1 million in gains. Some Sunbeam managers believe that Dunlap's generosity had a perverse impact. The outsize rewards made it easier for employees to do things they might otherwise refuse to do.

"I have thousands of résumés from people who would

work here for free," Dunlap would scream, inches from victim. "You are being paid to work here, and you can become rich because I've given you all these options. And you're letting me down. I'm working hard for you on the Street, and you're letting me down."

UNPAID BILLS. To make the quarterly numbers require a fierce dash to every finish line, yet for a long time, Dunlap's executives and managers did it. The company outdid Wall Street's projections for the first quarter of 1997, earning 2¢ per share, 2¢ better than expected. Its second-quarter profit

of 30¢ per share was right on the Street's estimate, and in the third quarter with earnings of 34¢ a share, Sunbeam beat the analyst consensus by a penny. In October, 1997, the stock hit a record \$50 a share.

Inside Sunbeam, however, there was little enthusiasm. The survival tactics of kissing up and kicking down sowed bitterness and frustration. By the fourth quarter, as it became more difficult to meet the numbers, Dunlap's new and rather menacing management technique was invented. It was called "tasking." Kersh and Dunlap would gather the top executives in the boardroom and ask each to run through the numbers for their businesses. If one area was lagging, someone else would be asked to make up the difference so Dunlap's forecast to Wall Street could be met.

"They would say, 'I don't care what your plan was



NUMBERS GAME

CFO Russ Kersh would remind fellow execs that he was "the biggest profit center" Sunbeam had. Dunlap would say: "If it weren't for Russ and the accounting team, we'd be nowhere"

don't care what you delivered last month," recalls Dix Thayer, head of international sales. "We are going to tell you to this number.' Russ [Kersh] would give you a revenue and profit number and say, 'We don't want any bullshit. Your life depends on hitting that number.' These numbers had to be so outrageous they were ridiculous."

In an effort to hang on to their jobs and their options, some Sunbeam managers began all sorts of game playing. Commissions were withheld from independent sales representatives. Bills went unpaid. Some vendors were forced to accept partial payment. One director reported getting a call from a he-

GEORGE
\$800,000 Sales

STEPHEN
\$3.25 million Sales

HELEN
\$3.5 million Sales

PETER
\$3.5 million Sales

PATRICIA
\$1 million Sales

RICHARD
\$2.25 million Sales

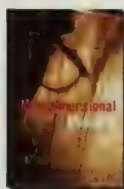
LEE
\$1.5 million Sales

JANE
\$2.5 million Sales

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hunter begging for help in collecting a bill from Sunbeam. "It was personally humiliating," recalled Susan Robertson, a manager in new-product development. "I couldn't tell for sure if they were simply pinching pennies or [if it was] because we were short on cash. Later on it became apparent it was the latter."

Other dubious techniques were used to boost sales. Product was heavily discounted to get retailers to buy more than needed. Credit terms were extended. By May of 1998, an internal memo shows, all of the company's major customers were loaded to the gills with Sunbeam merchandise. Wal-Mart Stores, for example, which prefers four weeks of inventory, was loaded with 23.6 weeks of Sunbeam appliances. "We were jamming inventory at people like you couldn't believe," said a top salesman. "Most of the stuff I had done before for solid companies. We just took it to another level. We did it every quarter, with every customer, on every product."

The games did not go completely unnoticed, even on Wall Street. By mid-1997, William H. Steele of Buckingham Research Group in San Francisco saw signs of trouble. Inventory in the second quarter hit \$208 million, up \$60 million from first-quarter levels. Meanwhile, cash on hand fell by \$36 million. Steele downgraded the stock to neutral in July.

Most analysts, however, were still in the midst of an extended honeymoon with Dunlap, who cultivated the relationship. Despite the chaos inside the company, Sunbeam's chief kept up a steady drumbeat of optimistic sales and earnings forecasts, promises of tantalizing new products, and assurances that the Dunlap magic was working. Even Andrew Shore, an analyst at PaineWebber Inc. and one of the few who hadn't entirely bought into the Dunlap mystique, upgraded the stock to a buy in October, 1997. He noticed the same disturbing trends as Steele, but wrote: "Sunbeam possesses an intangible asset, the Dunlap factor." **"THE DITTY BAG."** As Sunbeam moved toward the holiday season, its struggle to make its numbers became more desperate. Of all the ploys, few were as controversial and daring as the "bill-and-hold" sales of barbecue grills the company began making in early November. Anxious to extend the selling season for the product and boost sales in Dunlap's "turnaround year," the company offered retailers major discounts to buy grills nearly six months before they were needed. The retailers did not have to pay for the grills or accept delivery of them for six months. The downside was evident: The company was booking what would have been future sales in the present. Indeed, after Dunlap's departure from the company, outside auditors would force a restatement of Sunbeam's financials, pushing most of these sales—\$62 million worth—into future quarters. (Outside auditor Arthur Andersen & Co. declined to comment, citing pending litigation. Dunlap said bill-and-hold sales were proper under accepted accounting principles. "There is absolutely nothing improper about this practice," he said.)

In the fourth quarter, however, no amount of game playing or beating up on people could produce the numbers Dunlap

had promised investors. So he turned to his longtime and CFO, Russell Kersh, who had been with him through stints at Lily Tulip and Scott Paper.

In the often esoteric interpretations that are made in counting, Kersh was rarely conservative or bashful about his creative competence during his tenure as Sunbeam's CFO. In a self-congratulatory tone, he would point to his eloquence and boast to fellow executives that he was "the biggest player in the center" the company had. Dunlap knew it as well. In meetings, executives recalled, Dunlap would say: "If it were for Russ and the accounting team, we'd be nowhere." Several executives heard Dunlap shout to subordinates: "Make the goddamn number. And Russell, you cover it with your ditty bag."

The phrase itself was a nautical term. A ditty bag was used by sailors to hold small articles.

At Sunbeam, it was the collection of accounting techniques that Kersh could employ to maximize the company's net income and sales. Throughout 1997, Kersh had been regularly dipping into the numbers to help create a "turnaround" for his boss.

One technique was simply to move money into the excess funds that had been placed in reserves when Dunlap took his \$300 million restructuring charge in 1996. Like many CFOs, Kersh took a bigger write-off than he would need, allowing him to later bleed the excess into income. Until the fourth quarter, however, reversals were fairly minimal. In the first quarter, Kersh took into income only \$500,000; in the second, \$4.5 million; in the third, \$1.5 million; in the fourth, \$1.5 million.

In the year's final quarter, however, when profits were off significantly, Kersh opened the tap and poured \$21.5 million from reserves into income. (Kersh said: "Al's instructions to me at all time were to act in ways that were morally and legally responsible and that met our fiduciary duty to shareholders, and I did.")

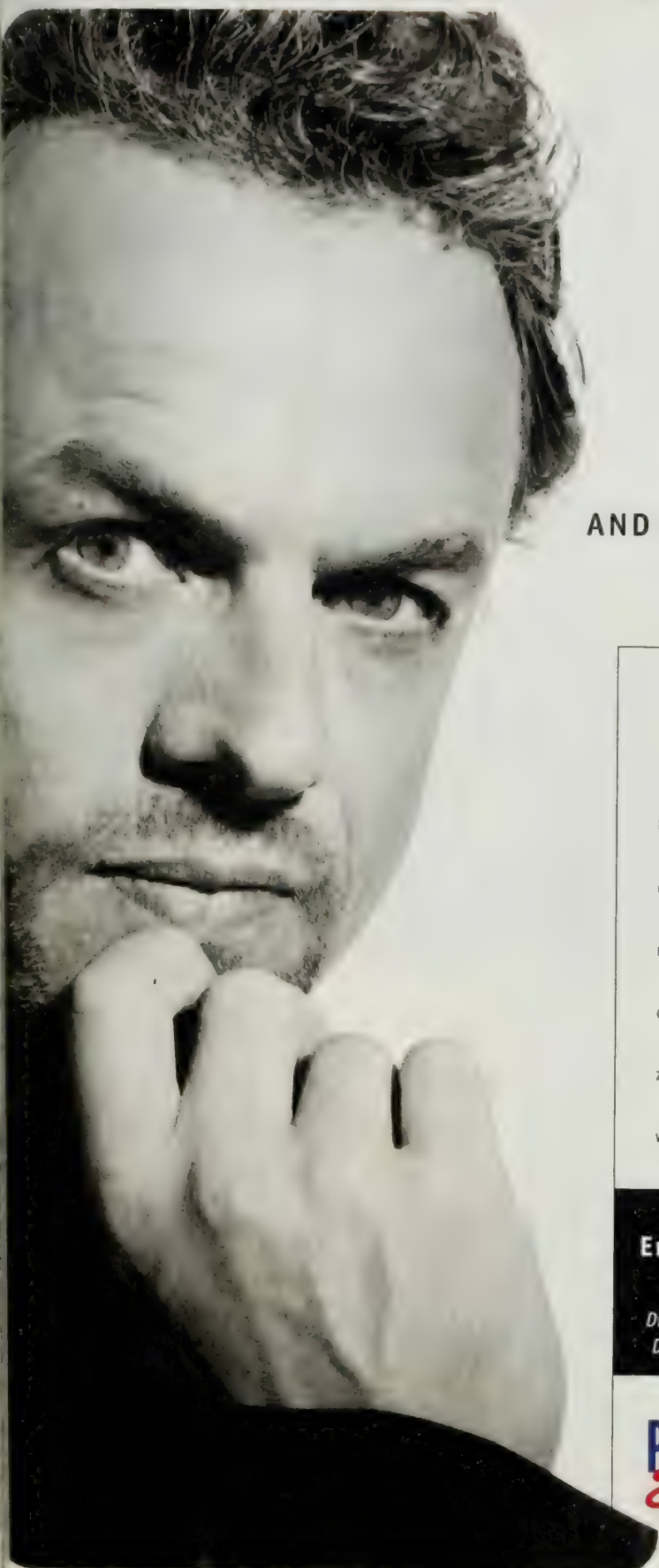
Despite the boost from Kersh, Sunbeam's fourth-quarter financials still disappointed Wall Street. When Dunlap finally reported the numbers on Jan. 28, he turned in earnings of 10 cents per share, which was a cent short of analysts' expectations. The shortfall caused Sunbeam stock to fall nearly 10%, to \$37.625. Dunlap attributed the stumble to lower sales of electric blankets.

What investors didn't know would have caused Sunbeam stock to suffer a total collapse. Shifting the \$21.5 million from reserves into income—a transaction that only came to light when Sunbeam restated its financial results a year later—enabled Kersh to disguise the company's calamitous erosion in profit margins. It helped to cover up the deep discounts given to customers by Sunbeam to stuff and load the retail channels. Auditors later concluded that grill sales made under massive discounts, extended credit terms, and "bill-and-hold" transactions inflated fourth-quarter sales by \$50 million. Instead of reporting revenues that were 26%, to \$338.1 million, Sunbeam sales would have increased by only 7%. (Dunlap said: "I had no reason to doubt the accuracy of any financial statement Sunbeam made while I was CEO, and I have no reason to do so now." Kersh said

"We had customers calling day and night, asking where their orders were. [They] were irate"

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relied on managers to be factual and candid and not to withhold negative information. "Similarly, we shared negative information with the board, and disclosed it publicly, as it was known," he said.)

As the company's performance deteriorated, the pressure inside Sunbeam was building. There were signs that it was even getting to Dunlap. In February of 1998, the Boca Raton police department received a phone call from a golfer who alleged that he had been assaulted at the Boca Raton Resort & Club, where Dunlap lives. According to the police report, Frank Schienberg, who winters in Florida, had hit

was futile. There was little follow-up to her recommendations. She believed that company officials provided satisfactory answers to the questions she raised about company's aggressive sales tactics. When Sunbeam resorted to hawking appliances in parking lots and empty storefronts to boost revenue, she unsuccessfully challenged transactions on the basis of inadequate controls. Product returns, the focus of one of her earliest audit reports, had become an even larger problem. For example, fully one-third of the merchandise sold in Canada in 1997 had been returned. "There was no consequence to it," she said.

Disillusioned, she put her frustrations on the record. In a memo dated Mar. 12, 1998, DenDanto raised questions about the function of the internal audit department, the bill-and-hold transactions, the accounting measures for them. She also expressed dissatisfaction over her department's inability to correct perceived misdeeds and mistakes.

"It is with much disappointment that internal audit must again bring to management's attention the lack of prudent, ethical behavior being engaged in by this organization in order to 'make numbers' for the company..." DenDanto wrote. She added that the bill-and-hold sales were "clearly in violation of GAAP (generally accepted accounting principles).

DenDanto intended to address the memo to Dunlap, Kersh, Uzzi and to copy it to Hartshorne and the board of directors. Before sending it, however, she wanted her boss to see it. Though angry, she felt a sense of loyalty to Hartshorne,



his ball just into a small lake near the 14th hole. As he and his wife strolled toward the lake, Schienberg saw Dunlap fish his ball out of the water with a metal golf ball retriever. When Schienberg asked for the ball back, Dunlap heaved it into the lake.

Schienberg told police that when he complained, an angry Dunlap rushed at him wielding the retriever and pressed the metal bar against Schienberg's throat, forcing him to his knees. When questioned by police, Dunlap denied that he assaulted the man but conceded he refused to hand Schienberg the ball back and said he dropped it where he found it. Schienberg, who later received a settlement from the club, could not be reached for comment. Dunlap received a much smaller settlement, charging the club had maligned him.

DISILLUSIONED AUDITOR. Back at headquarters, others were also reacting to the pressure. In March, a young, low-level employee in the company's internal audit department decided she'd had enough. Deidra DenDanto, 26, had joined the company in late 1996 after a two-year stint with Arthur Andersen. With Internal Audit Director Thomas Hartshorne, whom Kersh had originally recruited to Scott Paper, she was part of a two-person internal audit group.

Almost from the start, DenDanto had challenged deficiencies she perceived in operations. By early 1998, she had come to believe that most of her work at Sunbeam

GOLF ETIQUETTE

In February, 1998, the Boca Raton police department responded to a call from a golfer who alleged he had been assaulted with a metal golf ball retriever wielded by Dunlap

home, who she thought was "stonewalled" as often as she. Mar. 12, she called her boss aside and handed him the two-page memo.

"I'm done," she said. "I'm so sick and tired of doing my job and having it mean nothing."

Hartshorne, she recalled, glanced at the document and quickly ushered her into an empty office.

"You can't send this to the board," he said.

"Tom, you're my boss," she replied. "It's my responsibility to pass this to you. You do with it what you want."

(In a written statement, Hartshorne denied that he advised DenDanto against sending the memo. "I asked her if she



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I analyzed all of the relevant facts and she admitted that she had not.... I told her she had better make sure of all the facts before she sent out any memo," he said.)

Hartshorne picked up the phone and led Kersh.

"Russ," he said, "I've got Deidra here with me. She's very upset." Without mentioning the memo, Hartshorne explained DenDanto's concerns. Kersh attempted to reassure the auditor.

"There's nothing going on here," Kersh told her. "It's not what you're thinking."

After Kersh hung up, DenDanto recalls, Hartshorne again advised her against sending the memo. "Let's see what happens," he said.

"I'm sorry you're frustrated. Let's just wait."

DenDanto, not wanting to undermine her boss and reluctant to violate

chain of command, decided to keep the document on her laptop computer. But Kersh's words did little to comfort her. "We

have a token internal audit department," she said later. "I believed the notion was that

do nothing."

In his statement, Hartshorne said he did not believe the

and-hold sales violated GAAP and, further, that he had audited the transactions with Sunbeam's audit committee and with the outside auditors.)

CK CRATERS. It wasn't until Apr. 3, 1999, that Dunlap had acquired a trio of comedians, including camping equipment maker Coleman Co., and after he had publicly warned Wall Street of a slowdown in first-quarter sales, that Sunbeam began to publicly unravel. Early in the morning, investor relations chief Rich Goudis had driven his Maxima into the parking lot at the Sunbeam building. Inside, he left a succinct letter of resignation on Kersh's desk. It was a vicious letter, one that disguised his rising disgust for what was going on at Sunbeam.

Goudis was leaving the building when Fannin pulled into the lot.

"Hi, Rich," he said. "What's going

"Well," Goudis replied, "I'm leaving the company. I've always had great respect for you, but I can't work with Al and Russ anymore."

It was not a good omen. Fannin thought it was the worst possible time for the head of investor relations to quit. They were about to disclose news of another downturn in sales that would rock the stock market and draw hundreds of telephone calls from analysts, reporters, and investors.

He called Kersh at home.

"Rich Goudis has resigned," he said.

"Oh shit!" replied Kersh. "What's that all about? Why is he doing it?"

"He's taken another job. He left notes for everybody."

"All right," he said, "I'll be in in a few minutes."

Dunlap strolled into the office around 8:15 a.m., his normal starting time, with his normal starting words.

"What's happening?" he asked Fannin.

"Well, for starters, Rich Goudis is gone. He quit."

"Goddamn it!" said Dunlap. "I don't understand this generation. Well, we'll deal with it."

Once Kersh arrived, he and Fannin went into Dunlap's office with a draft press release

announcing what would now be the third consecutive piece of disappointing news to Wall Street. Dunlap, however, refused to read the statement.

"No one should be looking at the current results," Dunlap insisted. "They should be looking at the [company's] potential.... If you're going to do this, get yourself a new boy. I'm out of here!"

Before they could release any statement, though, the stock market opened and Sunbeam shares began to crater. There was a torrent of telephone calls from investors and analysts wanting to know what was going on. Goudis' secretary kept running back and forth between the offices with messages. "What do I tell them about Rich?" she asked. "Who's going to talk to them?"

Kersh soon discovered that the stock's tumble was caused by Andrew Shore, the PaineWebber analyst. Al-

"We were a token internal audit department, [meant to] do nothing"

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ys skeptical of Dunlap, he had become increasingly concerned by the deterioration of Sunbeam's balance sheet as well as the departure of several top executives. So he downgraded the company's shares.

In the face of the stock's free fall, Dunlap had become resigned to the fact that they would have to put out the press release. It said that Sunbeam expected to show a loss for the first quarter on sales that would be 5% below year-earlier period.

On a conference call with analysts the afternoon, Dunlap had lost his usual bullance. Reading from a prepared statement, he stumbled over the words, sounding stilted and wary as he indicated that the market

overreacted to Sunbeam's disclosure. By the time the market cooled, Sunbeam, the most actively traded stock on the New York Stock Exchange, had almost a quarter of its value, ending the day at \$34.375.

For Kersh, Sunbeam's keeper of the books, it had to be one of the most turbulent days of his career. He could not have eased his worries when DenDanto came into his office in the afternoon to say goodbye. Disentangled by the company's accounting practice, she had quit her internal auditing job.

PROBE. The stock's collapse that day did much to tarnish Dunlap's image on the Street. Futile attempts over the next few months to restore the company to profitability would ultimately lead to his dramatic boardroom ouster in June. Kersh was dismissed soon after.

More than a year later, Sunbeam continues to struggle. In 1998, the company's losses totaled \$898 million. Its management team narrowed the loss to \$108 million in the first half of 1999 on \$1.2 billion in revenues. Sunbeam's stock, which hit a peak of over \$100 under Dunlap, has been mired in a down bear market, trading under \$10 a share for most of the past 18 months. The company has been forced to renegotiate its loans four times since Dunlap's ouster. A number of shareholder lawsuits are pending, as well as a formal investigation of al-

leged by the Securities & Exchange Commission.

Many members of Dunlap's management team have gone on to other things. William Kirkpatrick was fired in January, 1998, allowing him to cash out his vested options near the stock's peak. In his first year off, he played 65 rounds of golf, rode his Harley motorcycle 2,000 miles, and read 200 books. He does some consulting but generally lives off the gains he collected from his Scott Paper and Sunbeam stock-option and severance packages. "When Sunbeam stock hit \$50 a share, I guffawed and blessed Al every minute of the day," he says. "Al Dunlap has improved the wealth of my family."

**"If you
want a
friend,
buy a dog.
I've
got two."**

AL DUNLAP

On the lecture circuit

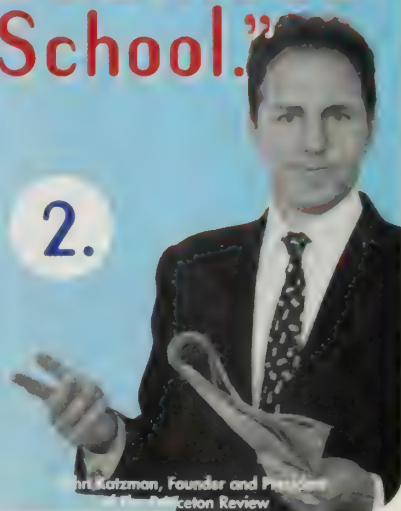
Others have tried to put their experiences at Sunbeam behind them as they moved on to new jobs and challenges. Uzzi is now senior vice-president for global marketing at Electronic Data Systems Corp. Fannin is general counsel of Office Depot Inc., while human resources chief James Wilson found a similar job at Lennox Inc. Internal auditor DenDanto works as a consultant in New York.

Two who have been unable to move on are Dunlap and Kersh. In June, the pair won a court ruling that required Sunbeam to reimburse them for legal fees they incurred defending themselves against the ongoing lawsuits and to pay for a new study by Burnett's firm reexamining the restatement of Sunbeam's financials. They have also filed arbitration claims in which Dunlap is seeking \$5.3 million in severance pay and the repricing of his stock options at \$7 a share.

Though unemployed, Dunlap traveled to Australia in late May to participate in a series of leadership lectures with Norman Schwarzkopf and Mikhail Gorbachev. To great applause, as well as a reported \$500,000 fee for five appearances, the executive delivered pithy one-liners, including his oft-repeated remark: "If you want a friend, buy a dog. I've got two." More recently, the caretakers of the golf course at the Boca Raton Resort and Club, reported seeing him wandering the links, retrieving stray golf balls. □

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'CLICKS AND MORTAR' AT GAP.COM

The clothing chain's stores and Web site work together to push up sales at both

Back in July, Diane Young had a yen to buy a three-quarter-sleeve black shirt from Gap. But the \$19 item was nowhere to be found in her local store. So Young went back to her office, logged on to Gap Inc.'s Web site and bought it there instead. With just a few clicks, Young was assured it was on its way. Ever since, shopping at gap.com has become a habit for the 28-year-old Manhattan Web-advertising producer. Twice a month, Gap sends her tailored e-mails promoting its latest specials. And thanks to the site's sharp graphics and easy-to-use format, Young figures she is spending 10% to 15% more at Gap these days.

That's sweet music for Gap executives. The chain retailer started selling mer-

chandise online in late 1997, an early convert to the then-revolutionary idea of apparel retailing on the Web. Now, that gamble is starting to pay off. Gap's online sales have tripled over the past year, according to Jeanne Jackson, the chief executive of Gap's Banana Republic store who's also overseeing Gap Inc. Direct, the online unit. She won't disclose specific sales, but analysts estimate that 1999 sales will range anywhere from \$50 million to \$100 million. That would be up from about \$20 million in 1998, according to Paul T. Cook, a Gap investor and portfolio manager for Munder Capital Management.

Online still brings in just a tiny fraction of Gap's \$9 billion in annual sales. But the growth

WELCOME: In-store "Web lounges" feature sofas and PCs logged on to gap.com

prospects are huge. As consumers shed their reticence to shop for clothes on the Web—and retailers shed their fear of cannibalizing their own stores—online apparel sales should reach about \$1.4 billion in 1999. That's up from just \$800 million in 1998, according to Boston Consulting Group Inc.

So Jackson, who became a star at Gap after her successful turnaround of Banana Republic, figures Gap must go out on the Net. At the core of her strategy is the conviction that the retail network of 2,600 outlets can be turned into an advantage in an online revolution that so far seems to give the edge to cyber-startups. By aggressively marketing both the stores and the Web site,

and allowing each to leverage the strength of the other—Jackson figures both will prosper. "This is about letting clicks and mortar let customers access the Gap brand, whether in the store or online," says Jackson.

Early indications suggest she's right. David Pecaut, a Boston Consulting senior vice president, says his research points into e-shopping sh-

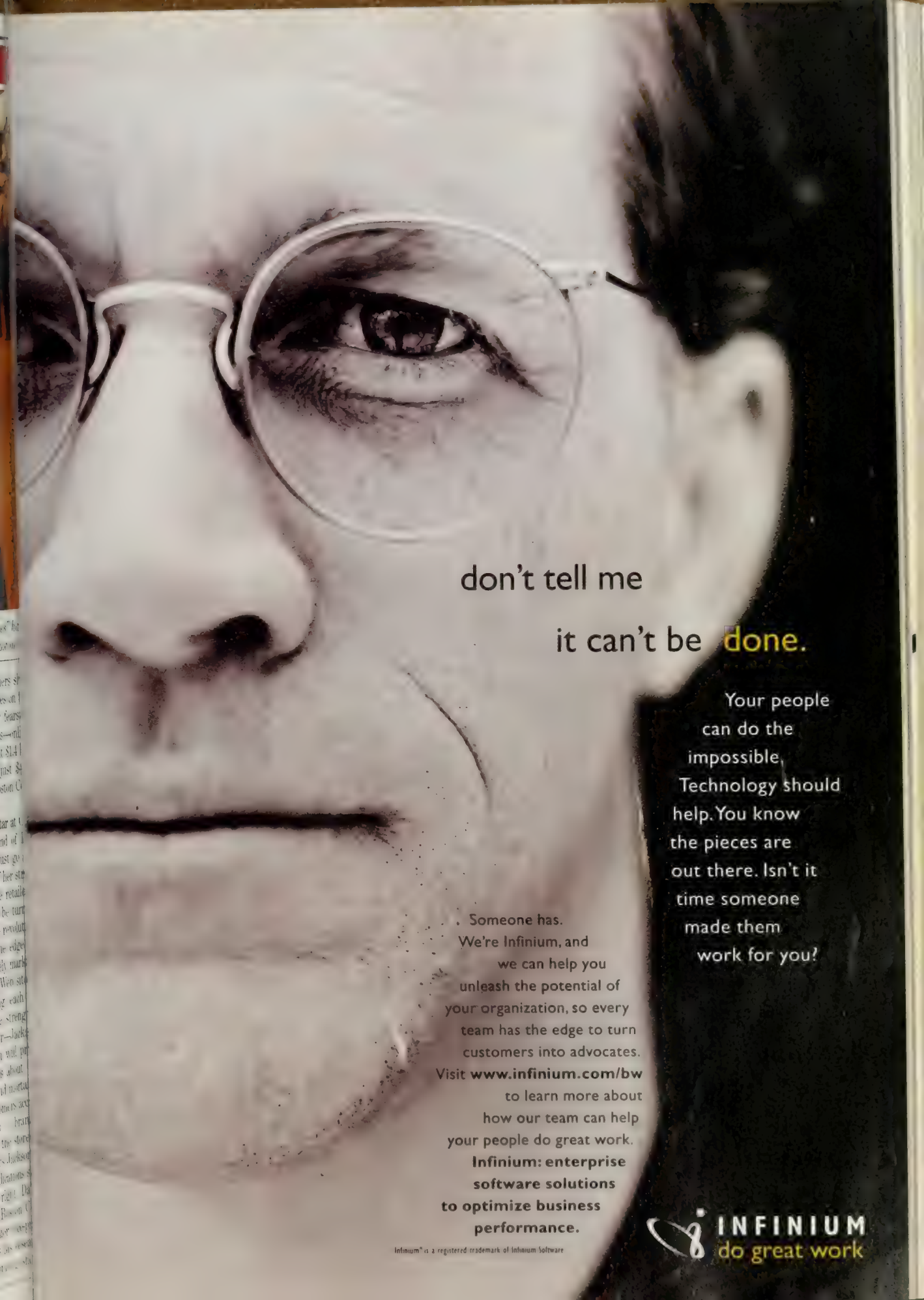
FASHION FORWARD

Among apparel chains, Gap holds the online lead

WEB SITE	ESTIMATED SALES MILLIONS*
GAP.COM	\$80-100
JCPENNEY.COM	\$60-80
EDDIEBAUER.COM	\$55-75
JCREW.COM	\$40-60
VICTORIASECRET.COM	\$25-40

* For the year ended on Sept. 1, 1999

DATA: NATIONAL RETAIL FEDERATION



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SURF 'N' SPEND

The Gap site carries everything that's in the conventional stores—and then some

that over 50% of consumers who buy online and in stores spend more than when they shopped only at stores. The rest spend about the same as before. And in a recent survey of 1,135 households by the National Retail Federation trade group, households reported spending an average of \$375 at gap.com over the past year. That's 26% more than second-ranked Eddie Bauer Inc.

What's Gap's secret? The same sort of compelling marketing and customer focus that has brought it success in the off-line world. The Web site is promoted at every cash register and, recently, in window displays with the slogan "surf.shop.ship." Clerks are trained to refer shoppers to Gap's Web site. And in eight high-traffic Gap and GapKids stores, the retailer has recently installed "Web lounges" that lure buyers with comfortable couches and sleek gray computer terminals hooked up to gap.com. Meanwhile, online customers can return items purchased on the Net the old-fashioned way, by walking into any neighborhood Gap. Together, the moves "persuade consumers to think, 'Hey, it's the online version of what I see on the street,'" says Pecaut.

FRENZY. Of course, leveraging a retail operation in hopes of outgunning Net-only marketers is the name of the game among chains from Nordstrom to Williams-Sonoma. Retailers are ever mindful of what happened to Barnesandnoble.com. Slow off the mark, its sales are a mere 11.5% of those at rival upstart Amazon.com Inc.

That's where Gap's retail network really helps. With more outlets than rivals J. Crew Group Inc. or

Eddie Bauer, Gap's better-known brand gives it an edge. Meanwhile, apparel giant J.C. Penney Co. hasn't been nearly as aggressive as Gap on the Web. And Gap is extending its online push with the launch of Web sites for its fast-growing Banana Republic and Old Navy units. "You see gap.com splattered everywhere," says Alan Mak, an analyst at Argus Research.

Yet despite Gap's growing online clout, its Net strategy is hardly a sure bet. Competition is rising from chains ranging from discounter Wal-Mart Stores Inc. to clothing rival Abercrombie & Fitch Co., whose ultrahip site has proven a huge hit among teenagers. And while it got wired early, Gap's cyberstrategy has been slow to shift into high gear. It was a full year after the site was launched before it began offering apparel for sale.

SEAMLESS FIT

By coordinating online efforts closely with its 2,600 retail outlets, Gap hopes to avoid cannibalization and build sales overall. Here's how:

- If you can't find your size at the store, walk over to the "Web lounge" or log on at home. There's greater selection and more sizes online.
- Bought some khakis on the Web that don't fit? You can return them to any store. It's convenient and gets shoppers into stores.
- Shoppers and users of in-store computers are encouraged to register for the site. That allows Gap to send weekly e-mails announcing sales, new styles, and even birthday reminders.

To make up for lost time, Gap is turning to some tried-and-true methods to convert walk-in shoppers to cyberspers. In July, Gap held an in-store drive to get customers to submit their e-mail addresses. To spur shoppers to sign up, Gap offered 10% off and free shipping on their first online purchase. That effort doubled the size of Gap's e-mail database, now a key way for the retailer to directly reach its customers. Gap's weekly e-mails plug specific merchandise and include links directly to apparel on Gap's Web site.

"EASIER AND EASIER." Once online, customers have access to virtually everything available in Gap stores—and then some. Items range from a tank top for \$10 to a leather pea coat for \$250. The site even carries extra-large pants sizes not available in stores. And to help customers choose their blue jeans, Gap installed a feature that lets shoppers contrast eight different cuts and styles, including such looks as "low rise," "straight cut," and "1969." Jackson says Gap's online purchases returned at about the same rate as store purchases because most online shoppers have a good idea of how Gap clothes fit.

That's the experience of Bonnie Harris, a 37-year-old public-relations consultant in Sausalito, Calif. Harris bought from Gap's online store half a dozen times since last Christmas. For her time, "it has been getting easier and easier to use," says Harris, who plans to spend \$400 to \$500 online at Gap this holiday season. Harris' most recent purchase: a sweater and skirt for about \$100, displayed together on one page.

With money like that floating around in cyberspace, Jackson has been scouting the virtual landscape for more ways to promote gap.com. Many more "Web lounges" are likely to be rolled out at busy stores across the country. Her latest scheme is a partnership with online music seller CDnow Inc. to cross-promote Web sales. That idea was hatched after a flood of e-mails from gap.com customers asked how they could buy recordings of the music played in Gap TV commercials. From swing music to easy-fit jeans, all a few clicks, the Gap is trying to make the most of the online revolution.

By Louise Lee in Mateo, Calif.





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POVERTY IN AMERICA

Special Report

BY AARON BERNSTEIN

You don't have to tell María D. Huertas how hot the U.S. economy is these days. Two years ago, she landed a \$12.58-an-hour job making shoe parts at a new Allen-Edmonds Shoe Corp. factory that had just opened in downtown Milwaukee's gritty Hispanic ghetto. The new job pays almost twice the \$7 an hour Huertas made in her last job, sewing women's clothing at a factory four blocks away. Today, she's taking home more than she ever has, as is her husband, Victor, a crane operator. "The economy has been very good to us," says Huertas, who recently bought a 1999 Isuzu Rodeo.

Huertas' story marks a long-overdue turning point in the U.S. economy. For nearly three decades, workers in the bottom half of the economy suffered an endless downward spiral as their wages sank further and further behind inflation. Even boom years left them largely untouched. Many experts wondered whether conventional trickle-down theory—the idea that economic growth eventually benefits almost everyone—had been upended by the relentless forces of globalization, the decline of unions, and new technology. These powerful trends have battered low-skilled workers

such as Huertas the hardest, creating a swelling underclass of working poor who could never earn enough to escape poverty, even with a full-time job.

Now, at long last, today's rip-roaring economy is starting to sweep up workers at the bottom of society, handing them real economic progress for the first time since the 1960s. Productivity gains spurred by the New Economy have fueled strong demand in virtually all sectors of the economy, creating the tightest labor market in a generation.

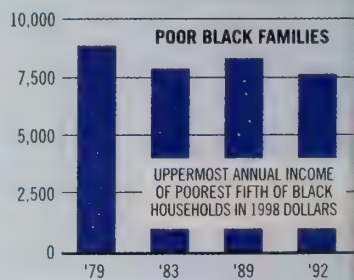
Just in the past two years or so, these extremely low jobless rates have lit a fuse under bottom-end pay, which has shot up by some 10% after inflation during this time—the largest gain in decades. Even the most disadvantaged groups are participating in the sudden U-turn: The inflation-adjusted wages of young African-American males who have

A BRIGHTER URBAN JOB PICTURE...



DATA: RICHARD B. FREEMAN AND WILLIAM M. RODGERS III

...IS LIFTING UP EVERYONE



DATA: ECONOMIC POLICY INSTITUTE



FINALLY, THERE'S SOME GOOD NEWS

NEW JOBS *In a taut labor market, Milwaukee's Allen-Edmonds is wooing the jobless where they live*

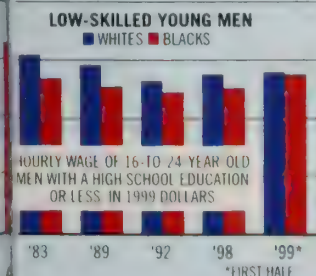
...ver gone to college, for example, have soared by 12% since 1996. And the Census Bureau's 1998 report, released Sept. 30, shows that the annual uppermost income for the poorest fifth of black households has jumped by 20% since '92, to \$9,160, even after accounting for inflation (charts). Of course, it's still remarkably low, but the growth was twice that of the real incomes of the average U.S. household in the same period.

The U.S. economy is so robust that its impact is reaching right into the heart of America's long-suffering cities. For the first time in nearly half a century, Corporate America is pouring billions of dollars in new investment into urban America. Employers such as United Airlines Inc. and Sprint Corp., which have hired thousands of welfare moms, are so desperate for new workers that they now go places they never before considered. Other companies, be they Walt Disney Co. or Starbucks Corp., are seeking expansion opportunities in even the toughest ghettos, where crime is declining, more people are working, and underserved customers now have more money to spend. All together, central cities are seeing the largest drop in poverty in 30 years, and inner-city residents are starting to get a few more of the basic services the rest of the country takes for

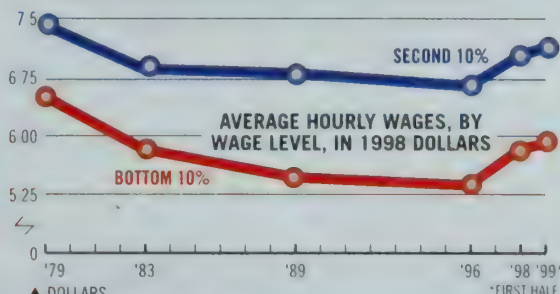
granted, from large supermarkets to easier credit. "We have a resurgence of downtown America, with jobs being created there again," says Susan M. Wachter, a nominee to head the Housing & Urban Development Dept.'s policy unit.

Don't misunderstand. A few years of hot growth haven't magically cured all the social and economic ills that plague the U.S. Look at the slightly U-shaped chart of low-end wages (left), and you can see that workers at the bottom haven't yet climbed back to where they were in the early

...DISADVANTAGED...



...BY RAISING LOW-END WAGES



BY IARD B. FREEMAN AND WILLIAM M. RODGERS III

1980s, much less the 1970s. And while the U.S. poverty rate has plunged by 2.5 percentage points in the past few years, to 12.7% last year, it remains above the 11.1% low achieved in 1973. African Americans remain much further behind whites economically: Their poverty rate hit a record low last year, but that only brought it down to 26%, more than double the white rate.

Plenty of other problems are a long way from being solved—from families without medical insurance to students attending lousy schools. Nor has the chasm between the poor and the rich narrowed in recent years. Income inequality stopped worsening since 1994, Census figures show, as low-income families' incomes began to rise at the same pace as those in society's upper tiers. But the gap is still stuck at the highest levels since the Great Depression, according to Census figures. Continued high levels of immigration from some of the poorest regions of the world haven't helped matters. Although newcomers often inject new blood into local economies, studies show that their willingness to accept extremely low pay has dampened wages at the low end.

Special Report

Still, there's real progress and even hope right now for most Americans on the low rungs of the economic ladder. In fact, while many experts hark back to the golden economic era of the 1960s, what's happening now may actually be better. The '60s boasted 4% unemployment and across-the-board wage gains, but it was also a time when the ghettos burned amid race riots and whites fled the urban devastation to seek safety in the suburbs. Now, cities are beginning to reemerge from those long, troubled years. "Trickle-down is finally happening after 30 years," says Ronald B. Mincy, a poverty expert at the Ford Foundation.

JUST A BLIP? The key question now is how much longer we can keep the good times rolling. Of course, Americans at every level will suffer when the inevitable downturn finally hits. But the fate of the working poor and inner cities are at a particularly precarious juncture. Several more years like the past two or three might lock in enough structural changes in central cities to reverse the decades-long decline at the bottom. If that happens, the next slump would still probably whack low-wage workers the hardest, as most recessions have done. But they would stand a better chance of



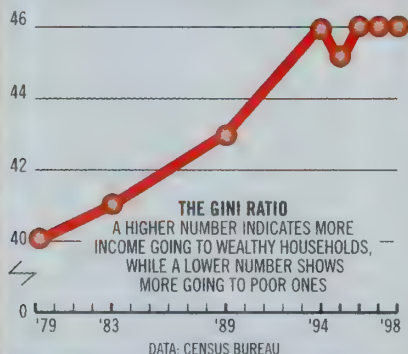
THE BAD NEWS *The number of uninsured is growing. In Venice, Calif., a mother and children wait for care in a family clinic*

picking up where they left off when the economy turned up again. If the economy turns down before this happens, many of the recent gains could turn out to be just a blip on the screen.

The high stakes put a new burden on the Federal Reserve and other policymakers. Although the Fed just demurred, on hiking

interest rates at its Oct. 5 meeting, the trade-off between low unemployment and the inflationary threat of strong economic growth has never been so stark (page 166). Trade factors have helped low-wage workers and inner cities. Crime has plunged in most cities, and big-city mayors are working with the private sector to lure companies back with tax breaks and other incentives. Shifting middle-class attitudes, too, have made many downtowns chic places to live and work again in recent years. But all of these factors together wouldn't sustain an urban revival without the fuel provided by fast growth and drum-tight labor markets. If the Fed hits the brakes now, the fragile gains at the bottom

INEQUALITY IS NO LONGER WORSENING...



... BUT THE U.S. STILL FACES MANY PROBLEMS

EDUCATION Students from poor families attend schools that are still by and large a disaster, and too many kids are ill-equipped for the marketplace

HEALTH CARE The ranks of the medically uninsured continue to climb, rising to more than 44 million people in 1998

POVERTY At 12.7%, the poverty rate still hasn't fallen to the '73 low of 11.1%

PRISONS Although the crime rate has fallen by 15% since 1992, the incarceration rate has jumped by 35%

RENTS The economic boom is raising rents faster than the incomes of many low-wage families, causing a severe urban housing crunch

WELFARE Many mothers who have left welfare for a job are worse off because they lost health insurance and must pay for child care

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could come to a sudden halt. "This recovery is critical for us to finally start solving some of our long-term social and economic problems, which raises the stakes for Fed policy," says Harvard University labor economist Richard B. Freeman.

The social progress under way flows directly from the extremely low jobless rate, which has edged down to around 4%, a level last achieved in

Special Report

the go-go economy of the 1960s. After two solid years, this appears to be the true level of full employment—not the 5% or 6% that most economists had assumed it to be since the 1970s. With labor so scarce, employers have lured virtually everyone with marketable skills back into the labor force who wants to work. In desperation, they have been forced to reach out to employees most companies would have previously shunned. Just look at workers

ment in living standards. It means that the lives of people like Judy R. Ford can change dramatically. Ford, 55, seen her annual pay as a Chicago hospital technician jump nearly \$27,000, from \$20,000 in 1993. Just as importantly, she has raked in an extra \$13,000 in the past year by working overtime. This gave Ford, who raised a daughter alone after she and her husband separated 25 years ago, enough to make a down payment on a house, the first she has ever owned. In early September, Ford moved out of a dumpy one-bedroom rental in a run-down section south of Chicago into a \$575-a-month two-bedroom condo with central air and an eat-in kitchen in a tidy blue-collar neighborhood. "I never dreamed that I would own a home, particularly as a single woman and at my age, because I didn't think anyone would lend me money," says Ford. "But I'm secure in my job, and the future looks good."

Even groups virtually written off by experts are seeing real wage gains. Young African-American males with low-level skills are among the most likely to use their skills and spend time in prison and drop out of school, making them a group shunned by employers. But they have been among the biggest winners recently, largely because their unemployment rates, among the country's highest, have come down the most, according to an analysis by Harvard's Richard B. Freeman and William M. Rodgers III, an economist at the College of William & Mary in Williamsburg, Va.

From 1992 to 1998, the unemployment rate for 24-year-old African-American men with a high school education or less saw their employment rates soar from 46%



in the lowest 10% of wage earners. Their inflation-adjusted average pay plunged by 18% between its 1979 peak and 1996, when it hit a low of \$5.37 an hour. Then Congress raised the minimum wage, and unemployment fell low enough so that even the least-skilled workers could find jobs. The result: Low-end wages rose to \$5.91 through the first half of 1999, a 10% real gain, according to an analysis of Census data by the Economic Policy Institute, a Washington (D.C.) think tank. Pay rates for workers in the lowest 20% and 30% of wage earners show a similar U-shaped pattern.

Tight labor markets mean not only higher wages but also more job security and more opportunities to earn extra with overtime hours, setting in motion an overall improve-

HOMEOWNER *With a stable higher income, people like Judy Ford, a Chicago health technician, can buy her own apartment for the first time*

54%, while the share of the entire 16-plus population with a job climbed only four percentage points, the study found. The result: The hourly pay of young black men has jumped by an inflation-adjusted 12% since 1992, to \$8.23 an hour in 1998. "Their wages finally took off when unemployment was low enough," says Rodgers.

DOWNTOWN JOBS. Such gains are inextricable from the revival of America's cities, where a majority of the world's poor reside. That's the story of Huertas' employer, Allen Edmonds Shoe. It opened its Milwaukee factory in 1997 after years of fruitless efforts to lure workers to its headquarters in Port Washington, Wis., about 30 miles away. "We were buying workers bus tickets, even making car loans to workers, but we just couldn't get enough people to come here," says Allen-Edmonds CEO John Stollenwerk. "So we decided to bring the work to the people."

Plenty of other companies now see inner cities as a hiring hall. Corporate America has snapped up more than 400,000 welfare mothers in the past two years, according to the Welfare to Work Partnership, a corporate-government program launched in mid-1997 by United Airlines, Burger King, Sprint, and Monsanto. Many former recipients haven't come out ahead, because they don't earn enough to pay for child care or for the health-care benefits they receive on welfare. Still, they now can participate in the economic

A close-up, artistic photograph of a woman's back and shoulder. She has long, light brown hair styled in a braid that runs down her back. A white rectangular label is stuck to her left shoulder. The label has a dark blue header with the words 'CARE INSTRUCTIONS' in white. Below the header, the text 'ADD VITAMINS, MINERALS AND SUPPLEMENTS. EXERCISE. RINSE. REPEAT DAILY.' is printed in a bold, black, sans-serif font. The background is dark and out of focus.

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AND SUPPLEMENTS.
EXERCISE. RINSE.
REPEAT DAILY.**

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more easily, giving them hope for advancement that simply doesn't exist on public assistance.

For example, United Parcel Service of America Inc., whose high turnover rate requires it to sign up more than 60,000 new workers a year, has hired 25,000 former welfare recipients in the past two years. UPS uses mentors to help former recipients learn

basic skills such as how to show up on time and dress appropriately. The entry-level jobs pay \$8.50 to \$9.50 an hour, mostly for package-sorting jobs. "You have to look for new employees wherever they may be," says UPS human-resources chief Lea N. Soupata. She says the company is very satisfied with the recipients, whose retention rate after a year is running at up to 70%, vs. 50% or so for all part-timers at UPS.

A Washington (D.C.) hotel and restaurant coalition is digging even deeper for workers. In early September, Marriott Hospitality High School opened with 65 students, expecting to grow to 200 in two years, in a run-down section of downtown that burned during 1960s riots. Now the area, near a new convention center under construction, is bustling with cranes as Marriott and other chains build in the area. The nation's first charter school devoted to hospitality plans to teach culinary arts and hotel management along with a regular high school curriculum. The students are nearly all poor African Americans from the neighborhood. "The kids coming out of this program will be capable of entering a position immediately, which will help the industry to defray training costs," says Dede McClure, head of the Greater Washington Hospitality Foundation, a coalition of hotel chains and restaurants that ponied up the \$3 million startup costs and \$1.5 million annual operating expenses for the school.

BACK TO MOTOWN. Even Detroit, long tagged "Murder City" for its terrible crime rate, is enjoying billions of dollars in new investment and a 9% jump in employment since 1993. And low-wage workers are among the biggest beneficiaries. Just ask Dean Jacobs, 40, who left a job at a Detroit commercial cleaning company in 1996 and had to start over as a sewing machine operator earning \$5.50 an hour. Since then, his employer, Canvas Products Co., has prospered and expanded, allowing Jacobs to nab several promotions, lifting his pay to almost \$13 an hour. And like Allen-Edmonds, Canvas Products moved back to central Detroit in 1996 after years in the suburbs.

Saturated with shopping malls and traffic jams, many suburbs are now places with limited growth prospects. Last summer, President Clinton toured the country with a clutch of CEOs to promote ghettos as emerging markets that should be just as attractive to Corporate America as those overseas. Plenty of companies already had come to a similar conclusion. "Others haven't made the investment in inner

cities, so there is pent-up demand there," says Charles C. Conaway, president of CVS Corp., a Rhode Island-based national drugstore chain that has blanketed Detroit with 20 new stores since 1996 and plans to expand stores in New York, Baltimore, Philadelphia, Boston, and Washington.

Harvard University business school professor Michael Porter has tried to quantify how much demand there really is. Five years ago, he started the Initiative for a Competitive Inner City (IIC), which last year analyzed the incomes and spending of 7.7 million households living in every zip code in the country defined as inner city. The conclusion: Ghetto residents shell out some \$85 billion a year on retail goods and services, or nearly 7% of total U.S. retail spending. But they spend more than 25% of those dollars in non-inner-city neighborhoods, the IIC discovered after

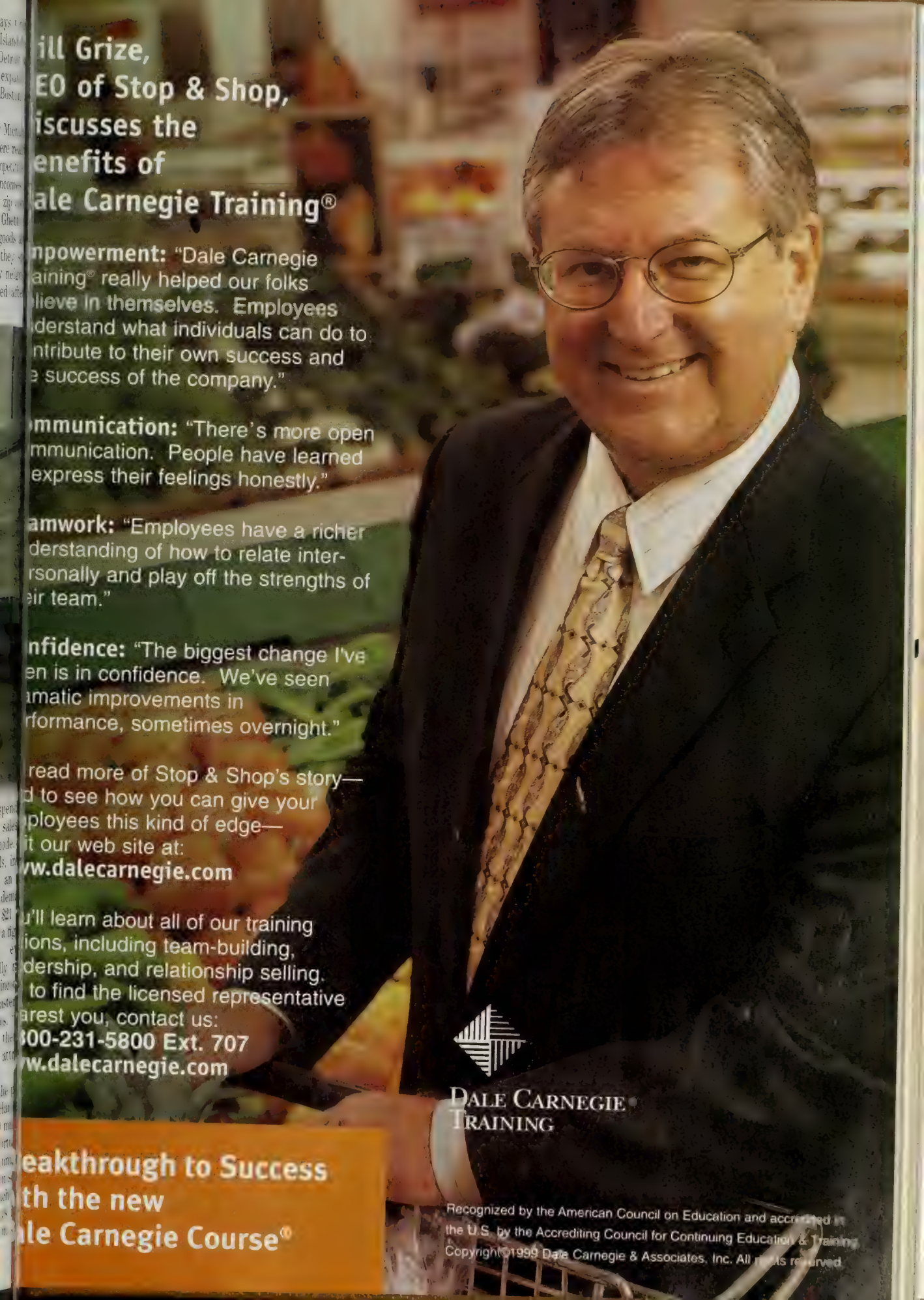


REVIVAL Companies seeking workers—and consumers—are focusing on inner cities. Harlem's first big chain supermarket is one result

retail market in many urban areas," says Porter.

Many companies are jumping into the breach. In the past year, Starbucks and Disney have made moves into Harlem, lured by a 60% reduction in crime and more than \$550 million in government funds and tax incentives. In April, the virtually all-black ghetto got its first chain supermarket, a Pathmark. Its first mall, the \$65 million Harlem USA, is due to open soon, followed by a 430-room hotel and a shopping center anchored by Home Depot Inc. and Costco Cos.—the first forays in any part of Manhattan for both chains. "The boom

matched spending with retail sales in each zip code. In other words, inner cities have an unmet retail demand of at least \$21 billion a year, a figure mounting more rapidly now that family incomes are rising faster in many ghettos. "We found that there actually an att



Bill Grize,
CEO of Stop & Shop,
discusses the
benefits of
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Empowerment: "Dale Carnegie Training® really helped our folks believe in themselves. Employees understand what individuals can do to contribute to their own success and the success of the company."

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changed the perception of this area, and now big retailers are more willing to come in," says Regina L. Smith, project director of the Harlem Business Alliance.

It's not just retailers who see new opportunities. In 1997, Aetna Inc. formed a Domestic Emerging Markets Group to

Special Report

sell 401(k)s and mutual funds to underrepresented groups such as minorities and women-owned companies. As part of the effort, Aetna is developing products for lower-income families, such as funds requiring lower monthly contributions. The group has targeted a dozen major urban areas and has already surpassed \$313 million in assets under management—50%

ing a new back-office operation for 200 permanent workers and an additional 600 or so seasonal ones in that city's most blighted area. "The suburban locations we looked at gave us access to employees living in just one quadrant of the city," says Terrence R. Ward, Block's vice-president for facilities. "Here we can draw from the entire metro area, a key concern with unemployment at just 2.8%."

Ghettos also can provide cheap real estate and tax breaks for companies willing to take a risk. In 1996, Lowell Gray, founder and CEO of Shore.Net, a startup Internet service provider, realized that his fast-growing company had outgrown its rented space in Lynn, Mass., a decayed industrial town near

Boston that lost most of its factories in the 1980s. He scouted the surrounding suburbs and decided instead to buy and renovate a 100-year-old building in Lynn that lay abandoned after the last occupant, a leather-goods manufacturer, had fled overseas. "We chose to invest here because of the infrastructure, access to a commuter train, and because it was cheaper and we had tax incentives," says Gray. About half of his company's 86 workers do customer-support work, which doesn't require a college education. Shore.Net gives preference to local low-income residents who land jobs starting at \$18,000 a year. "There are many other jobs like this around here," says Michael Ann Reyes, a local resident and single mother who started a job last summer placing customer orders.



higher than the \$200 million goal set for this year. "We found in genuine emerging markets around the world that whenever people claw their way into the middle class, they buy life insurance, health care, and some kind of retirement savings," says Aetna CEO Richard L. Huber. "Now, we're targeting these markets in the U.S. because they are underserved."

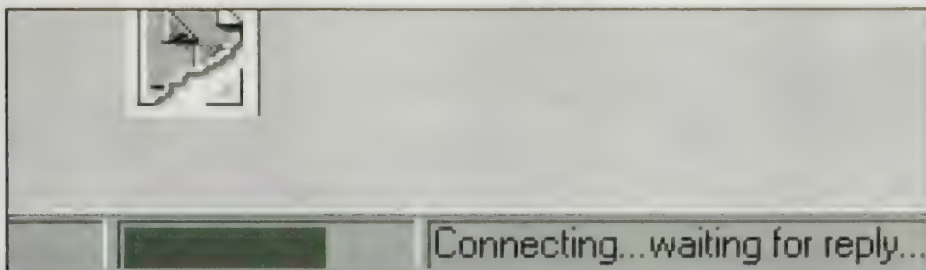
Other companies are lured by a new view of inner cities as promising commercial locations that are close to city business districts. Since early last year, Marriott International Inc. has opened a dozen no-frills hotels in seedy downtown areas, including an abandoned molasses factory in New Orleans, a former plumbing company headquarters in Omaha, and a converted City Hall annex in Philly. The goal: to offer corporate road warriors a downtown location—and find new expansion opportunities now that Marriott has already blanketed the suburbs. And Kansas City (Mo.)-based H&R Block Inc. is build-

TRAINING *The newly opened Marriott High School trains kids from a run-down section of the capital to be hotel and restaurant workers*

GHETTO EQUITY? The new outlook for America's downtowns has even prompted a few brave souls to set up equity investment funds to capitalize on the trend. Last summer, Banc of America Corp. set up a \$500 million "Catalyst Fund" to make equity investments in run-down urban areas. And Harvard's Porter and ICIC were so convinced by their own research that they have formed a joint venture called Inner-City Ventures Equity Partners with American Securities Capital Partners, a private investment firm in New York that manages a billion of wealthy families' money. The venture is about to issue a prospectus to raise a \$100 million fund to take equity stakes in inner-city companies in fast food and health care, among other sectors. "We see opportunities to put money to work in inner city and earn 20% to 30% annual returns," says President Michael G. Fisch. His firm and ICIC have put a total of \$10 million of their own money into the fund.

The burst of economic activity has already taken a bite out of urban poverty. After years of soaring poverty, the national poverty rate, the share of central city residents below the poverty line has come down by 2.7 percentage points, to 18.5%, since its all-time high in 1993, according to an analysis by HUD's Wachter. That's twice as much as the decline in suburban poverty and the largest improvement since 1967, when the data on urban/suburban poverty first became available. Similarly, the poorest fifth of households in inner cities have seen their per capita income beat inflation by 16% since 1994, Wachter found. By comparison, the average U.S. family has gained just 8% since then.

The U.S. still has a long way to go before all of its



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zens are sharing fully in the prosperity that reigns today. After all, the 10% pay hike that the lowest workers have enjoyed in the past two years amounts to a pitiful 60¢ an hour. Still, even this is good news after the decades of unremitting pay cuts for those at the bottom. And it won't keep up unless employers continue to feel a compelling need to hire these workers.

Special Report

COMMENTARY

By Aaron Bernstein

FULL EMPLOYMENT WON'T SEND PRICES SKY-HIGH

The Federal Reserve did the right thing by holding its fire on Oct. 5. With economic indicators flashing mixed signals, even most inflation hawks don't see a need for preemptive rate hikes. Still, Fed Chairman Alan Greenspan remains anxious about prices, which the board made clear by signaling a bias toward tightening at the meeting.

Before the Fed takes further action, however, it should factor into its decision-making a new set of economic indicators: the wage gains of low-end workers, which full employment has lifted up for the first time in decades. This has occurred because Greenspan allowed the economy to grow faster than experts had predicted would be prudent.

Even so, he and most Fed governors didn't aim to improve the lives of the poor; they perceive their mission as ensuring price stability, period. To them, gains by low-end families are a wonderful side benefit of monetary policy, not economic data relevant to managing the economy.

It's time for a fresh look. After all, the U.S. economy will be healthier in the long run if most participants share the fruits of progress, which will spur them to work harder and more hours. The economy also will be tapping vast underused resources as urban America continues its comeback.

Technically, the Fed already is supposed to balance full employment and price stability. Congress spelled this out in the Employment Act of 1946 and again in the Humphrey-Hawkins Full Employment & Balanced Growth Act of 1978. The Fed has largely ignored the mandate ever since the stagflation of the 1970s, when

many economists came to see the idea of a little inflation as an oxymoron.

They did so because they believe that prices will accelerate out of control if the jobless rate drops below full employment. To avoid such an outcome, most Fed officials assume that they can't wait for prices to actually rise before lifting rates.

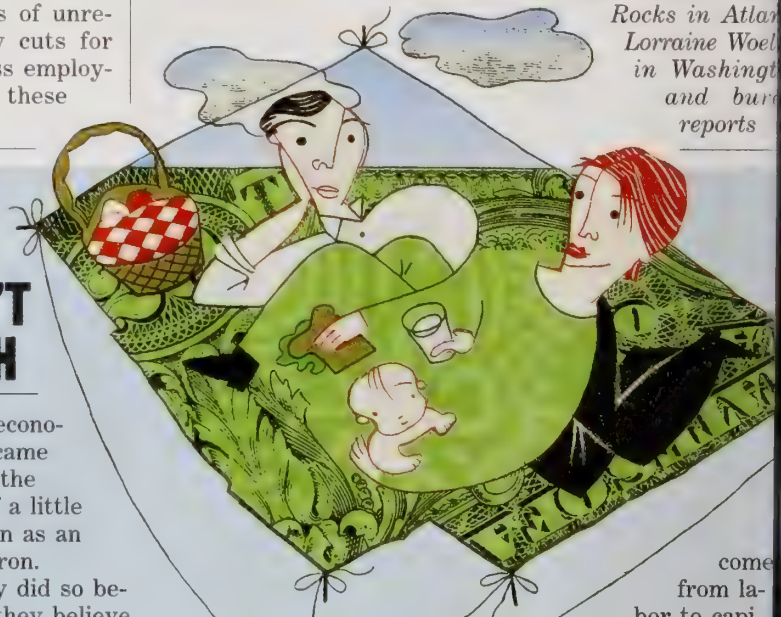
But if that view ever accurately described the U.S. economy, it no longer does. True, prices may rise slightly faster in the next year or two. Energy prices have rebounded, and the weaker dollar is lifting import prices. And the Bureau of Labor Statistics has largely completed its revisions to the consumer price index, which lowered the inflation rate in recent years. But all these things together won't ignite runaway inflation.

Moreover, structural changes have altered the dynamic between full employment and consumer prices. Today, globalization and deregulated domestic markets keep a tight lid on employers' ability to pass along wage pressure in the form of price hikes.

There has also been a shift of national in-

Therein lies the lesson: The best way to cure poverty is to get the jobless rate down to 4% or so—and keep it there for years to come.

With Ann Therese Palmer in Chicago, Michael McBride in Detroit, David Rocks in Atlanta, Lorraine Woolf in Washington, and bureaus reports



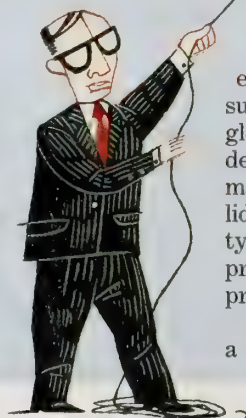
come from labor to capital, which also helps keep growth from kicking off wage-push inflation today. Labor's

share of income in the corporate sector fell sharply throughout the first half of the early 1990s, when wages lagged and profits soared. The jump in pay rates since 1996 has boosted labor's share slightly. But it still remains 2.5 percentage points below its 1989 peak, according to the Bureau of Economic Analysis. So even if productivity gains aren't sufficient to pay for future wage growth down the road, corporations can afford to pay slightly higher wages and still maintain their historic share of national income.

Thus if the jobless rate falls, the CPI might rise a notch—but is not likely to accelerate out of control. Even some Fed governors concede this applies today. It's now safe to "wait until inflation actually starts to rise before acting to tighten," concluded Robert T. Parry, president of the Federal Reserve Bank of San Francisco in a Sept. 27 speech.

If that's right, the Fed can afford to embrace its historic mandate once again and weigh the benefits of full employment against the need to head off inflation. Those benefits will only come if the jobless rate stays at the low levels we're enjoying today.

Bernstein writes about wage trends and social issues from Washington.





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ASIA HITS A BUMP

Investors want to see more reform

Once again, an eerie silence has fallen on the financial markets of East Asia. Until mid-summer, the region's bourses had spent most of the year roaring back after their worst contractions of the post-war era in 1997 and 1998. And countries from South Korea to Indonesia were boasting that their economies were rebounding far faster than expected. But ever since then, stock and currency markets outside of Japan have been on a gradual—but steady—slide. Hong Kong stocks are down 10% from their highs of July, while Korean shares are down 20%. Measured in U.S. dollars, Thai shares are up only 3% for the entire year. Foreign funds are running from Malaysia. The Thai baht and Indonesian rupiah have gone limp, and foreign bank lending throughout Asia's emerging markets is still shrinking.

Is East Asia's recovery stalling? Not exactly. But it is entering a new, more difficult phase. Yes, the underlying economies of Asia are still posting encouraging gains in consumer spending and industrial output. And exporters of everything from computer chips to car parts are enjoying double-digit growth. In Thailand, for example, exports rose 15% in August year-on-year, while imports surged 25%. And if the yen keeps rising against the dollar, as many economists predict, the climate for exporters

should stay good since most regional currencies tend to track the greenback.

The worry is that the sagging markets may signal a broader weakening of confidence. If so, new problems could lurk. Consumer spending could sputter again. And investment needed to finish infrastructure projects and modernize factories may be slow to arrive.

Several forces are at work. Two U.S. rate hikes, with perhaps more in the pipeline, have cooled the global appetite for equity investments. And the Japanese yen's relentless ascent against the dollar could force the U.S. Federal Reserve to drive rates higher—making capital more expensive for the region's emerging markets.

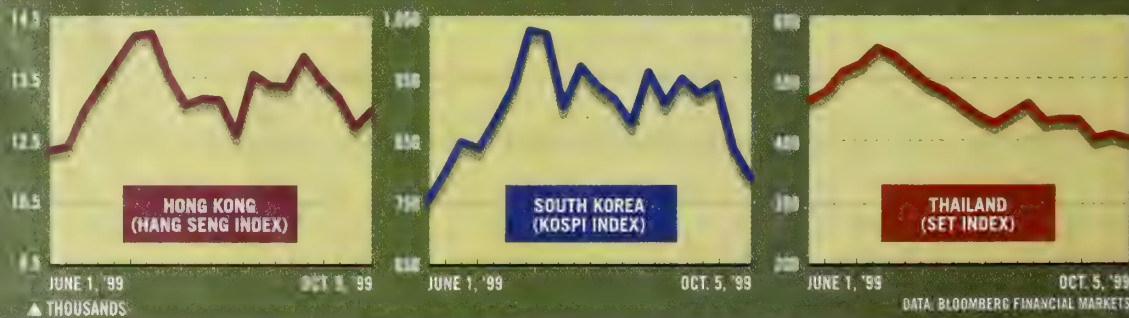
SERIES OF HITS. What's more, investors are taking a harder look at reforms that were supposed to rejuvenate East Asia's financial systems and corporations. "The big money off the recovery has been made," says portfolio manager Mark Headley of San Francisco-based Matthews International Funds. "Now, Asia's going to have to earn [future investment] by proving that all these reforms are going to translate into earnings growth."

Across the region, investors are no

longer satisfied with what they're seeing. Confidence in Indonesia has been obliterated by the Bank Bali scandal, the military's debacle in East Timor, and worries over political instability. Thai markets have been socked by endless messy bank workouts. Malaysia's decision to partially lift capital controls Sept. 1 resulted in a flight by investors suspicious of that government. And this year's runup in South Korean stocks has been hit by worries of a collapse of giant investment trusts. "Wrap all these things up together, and they add up to an environment of considerable investor uncertainty," says Michael Kurtz, an A



ASIAN MARKETS LOSE STEAM





by \$26 billion, on top of last year's \$50 billion contraction, according to the IMF. Next year, foreign lending is expected to shrink by an additional \$28 billion. That compares with a \$110 billion rise in lending in 1996. Of course, Asian corporations are under pressure to slash debt. But foreign debt issuers, after writing off some \$300 billion in East Asia over the past year, also are wary of putting in new money.

Investors are also looking for more reform for their buck. Korea, for example, has been slow to sell off banks to foreign interests, as promised, and quick to keep giants like Daewoo Group from bankruptcy. Now, state-owned Korean Exchange Bank has had to shelve a \$1 billion sale of stock because of falling prices and dampened sentiment.

The investor backlash against Malaysia has been especially furious. Foreigners

have fled the country since Prime Minister Mahathir Mohamad imposed capital controls in 1998. Cumulative net portfolio investment into Malaysia, which had already fallen by 20%, to \$1.2 billion, from July to August, plunged to \$178 million in the two weeks after Malaysia lifted the 10% exit tax on repatriated principal of foreign portfolio investments on Sept. 1.

The big test for recovery will come in another year, predicts Daniel Fineman, chief regional strategist for Jardine Fleming, when Asian manufacturers will again need to raise capital to build new capacity. "Will financial systems be healthy enough—and companies' earnings be low enough—to take on new debt?" asks Fineman.

Much depends on how quickly old bad debts are worked out—and if reforms stay on track. "If nonperforming loans cannot be resolved, the recovery cannot be sustained," says Praphad Phodhivorakhun, vice-chairman of the Federation of Thai Industries. It's a warning that pundits have sounded since the Asia crisis began. Now, the markets are sending the same message.

By Sheri Prasso in New York, with Brian Bremner in Tokyo, Michael Shari in Singapore, Mark L. Clifford in Hong Kong, and Emily Thornton in Bangkok

Conditions in Indonesia, Thailand, Malaysia, and Korea have created "an environment of considerable investor uncertainty"

ategist for London-based economic-forecast-firm IDEAglobal.com. The yen is adding to uncertainty. Japan has been a big force behind the region's trade boom. Imports from neighboring countries jumped 13% this year after dropping 10% last year. But the stronger yen, now near 105 to the dollar, vs. 140 in August, 1998, has also forced Asian companies to buy yen to service their debts to Japanese banks. That's hurt regional currencies. The Thai baht dropped from around 37 to the dollar in July to nearly 42 in early October before the Bank of Thailand brought it back to under 40. "If the yen goes to 100, that will put pressure on currencies again," says economist Charles Wheeler of Standard & Poor's International in Singapore. Concerns over Year 2000 computer bugs are also giving the markets pause. Even if big Asian companies are spared, investors fear that problems with smaller companies down the supply chain may wreak havoc. "We've talked a lot of investors who are talking

about reallocating until after the New Year," says portfolio manager Headley. "We've been referring to Y2K as Y2 Not Invest in Asia."

Some falloff was to be expected after the heady gains of earlier this year, when equity prices in China, India, Indonesia, Malaysia, and South Korea rose as much as 60% in dollar terms. But even if Y2K proves to be a false alarm, it will still be some time before the money flowing into Asian markets returns to pre-crisis levels. The Washington-based Institute of International Finance Inc. projects that just \$9 billion in portfolio investment will flow into Asia in 2000—down from \$15 billion this year and less than half of the total for 1996.

Perhaps more troubling is that foreign bank loans and debt instruments are also forecast to contract this year,

JAPAN

REFORM WITH KID GLOVES

Can Michio Ochi keep the financial restructuring drive going?

Japanese bank executives called it the reign of terror. It began when Hakuo Yanagisawa, 64, became financial reconstruction minister in December. He and a small army of lawyers and accountants grilled Tokyo's patrician bank presidents relentlessly about the true state of their loan books and hectored endlessly about restructuring. "He had a very harsh stance toward us," complains one executive at a major Tokyo trust bank.

Yanagisawa may have saved Japan's banking system from collapse, but in the end his reform push was too hard. On Oct. 5, he was replaced by Michio Ochi, 70, a former Ministry of Finance (MOF) bureaucrat and consummate Liberal Democratic Party insider. The official spin: Yanagisawa merely got snagged in a revolving-door Cabinet reshuffle. No way, say some observers: "The guy took a bullet," counters a Tokyo-based Western investment banker.

STALL-OUT? In his brief regulatory rampage, Yanagisawa sure created influential enemies. Most Japanese bankers loathed him. And many officials resented the way the Financial Supervisory Agency, which reported to Yanagisawa, took control of the Japanese financial system from the the once all-powerful MOF. He once boasted to *BUSINESS WEEK*, for instance, that "maybe I'm the only one who can promote restructuring in Japan's financial industry."

If he's right, that means urgently needed Japanese banking and financial reform could stall. However, Ochi has an early chance to prove him wrong and redeem the government's pledge that reform remains a priority. Nippon Credit Bank, a nationalized long-term lender staggering under \$28 billion in bad loans, is now on the block. Morgan Stanley Dean Witter has been hired to sell it, which won't be easy as Nippon is embroiled in prosecutions and lawsuits for allegedly cooking its books. Rumored interested parties include Chuo and Mit-sui banks, which plan to merge next year, as well as J. P. Morgan and Kohlberg Kravis Roberts.

The foreign buying interest makes Nippon an acid test of Japan's commitment to reform. That's because on Sept.

28, Yanagisawa broke a big taboo by giving the nod to an international banking consortium, led by New York-based Ripplewood Holdings, to buy nationalized Long Term Credit Bank in a \$1.2 billion deal. So if the impending Nippon sale smacks of a fix to keep a su-

THE MAN...

Michio Ochi, 70, Japan's new top bank regulator, is a political insider married to a daughter of late Prime Minister Takeo Fukuda. Once a Finance Ministry official, he helped craft last year's \$570 billion bank bailout.



...AND HIS MISSION

FIX about 30 failed or nationalized small banks before opened government deposit insurance is capped in April, 2001.

PROP UP life insurers that can't generate enough investment profits to pay out on claims and are facing policy cancellations.

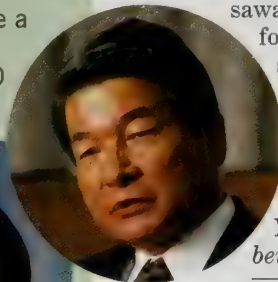
SELL Nippon Credit Bank, which has \$28 billion in dud loans. An inside deal favoring a local player could lead foreigners to dump bank shares.

DATA: BUSINESS WEEK

perior foreign bid out, Ochi runs the risk of bringing to an abrupt end the foreign-driven rally in Japanese bank shares which has helped shore up the system since last fall.

Certainly, Ochi has the smarts to judge how the markets perceive the sale. The worry is rather that he lacks his predecessor's in-your-face assertiveness and willingness to cut deals with foreigners. At his first press conference on Oct. 5, Ochi vowed to treat prospective foreign buyers "without prejudice and in a fair manner." However, he recently predicted publicly that Ripplewood "would make a quick lunch out of LTCB—by stripping its assets and helping for the exits. Also, he has hinted that opening the floodgates to foreign capital isn't in Japan's interest.

All the same, some analysts argue that it's no bad thing to have a cool head in charge of bank reform. Yanagisawa's tactics were too tough for a banking system in such a delicate state, they say. And despite his lower profile, Ochi is



HOTHEAD: Bankers accused Ochi's predecessor Yanagisawa (top) of being too harsh

slouch. In 1995, he helped fashion a billion rescue of seven housing loan corporations. Then, last year, he played a key role in crafting legislation to set a \$570 billion bank bailout.

INSURANCE FIX. Ochi will need all the touted financial acumen to cut through the accounting gimmicks and asset stripping endemic among dozens of weak regional lenders and credit cooperatives. He doesn't have much time to sort them out because in April, 2001, the government is set to cap its deposit insurance at \$86,000 per account—which could spark a run out of weak banks. And Ochi has to fix Japan's giant life insurers. They are squeezed between large-scale policy cancellations and their troubles in generating enough income to cover claims. And Ochi may have to cope with another spike in corporate bankruptcies when Tokyo winds down generous lending programs to small companies.

Ochi's new job is hardly a walk in the park. Yanagisawa's brief tenure got global investors and central banks some hope that Japan was finally serious about fixing its crippled banking system. It would be tragic if Ochi were to betray that legacy.

By Brian Bremner in Tokyo

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ALL OF THE TIME.
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NEVER LIKED
THOSE ODDS.**

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ITALY

OLIVETTI: BACK TO THE BAD OLD WAYS?

Its move to split Telecom Italia has got investors in a rage

In June, Olivetti Chief Executive Roberto Colaninno outmaneuvered goliath Deutsche Telekom in a bruising \$33.3 billion hostile takeover battle for Telecom Italia. He wielded shareholders' support to break a merger between two former monopolies and walked away with a company five times the size of Olivetti, making him a standard-bearer of global capitalism.

But his glory has been short-lived. Since Sept. 24, when news leaked of Colaninno's restructuring plan for Telecom Italia, its stock price has slid over 6% as fund managers and market analysts savaged his strategy. Hundreds of irate minority shareholders have joined the attack, pelting Colaninno with angry letters and e-mails copied to the Italian daily *La Repubblica*. "The so-called new capitalism," fumed one investor, "must have been learned in Moscow."

Those words sting. Until recently, Italian financial markets seemed to be moving away from the self-serving manipulations of a political-industrial elite. Now, fund managers say, if Colaninno prevails at the expense of minority shareholders' interests, the Italian markets will suffer a major setback, both moral and economic. "The deal is not fair. It creates a bad image for the Italian markets," says Massimo Fortuzzi, chief investment officer of Finanza e Futuro, a Milan-based investment fund. Upcoming privatizations, such as the \$8 billion public offering of energy giant

Enel, could founder. "They need to get a grip before the next round of privatizations, or we'll all be a lot less inclined to buy shares," says a fund manager at one of Europe's biggest institutions.

Colaninno's plan outraged Telecom Italia investors because it would strip the company of its most valuable asset, Telecom Italia Mobile, and transfer it to Tecnost, the debt-laden shell company Olivetti used to finance its takeover of

Telecom Italia. At the time of the takeover, Colaninno had led Telecom Italia shareholders to believe that Tecnost and Telecom Italia would merge.

Instead, Colaninno reversed course. Infuriated Telecom Italia shareholders insist they are getting a raw deal in the share swap proposed by Colaninno. They say that at the very least, they deserve more Tecnost shares in exchange for giving up the cell-phone business. Besides, Tecnost is already saddled with \$16 billion of debt related to Telecom Italia's takeover. "If Colaninno wants to go forward, we expect a significantly better exchange ratio, not just a marginal improvement," says Giovanni Grimaldi, director of investments at Prime Gest, a Milan-based asset-management company.

Colaninno denies any nefarious intentions. At an Oct. 6 meeting with investors in Milan, he promised to appoint an independent advisory committee to protect the interests of minority shareholders. The swap will be vetted by an independent expert of the Turin court. "We cannot

SLICK MOVE?
Colaninno wants to transfer the cell-phone biz

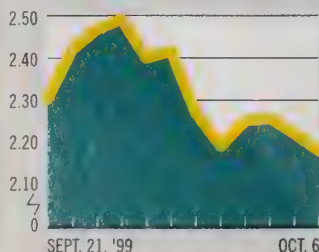
interfere with the fair valuation as decided by court," says Colaninno. Many investors think Colaninno tried to get away with a deal that fleeces minority shareholders, misjudging the mood,"

a London analyst.

The controversial maneuver to spin off TIM is attractive to Colaninno because it allows Olivetti to finance the mountain of debt while maintaining maximum control over Telecom Italia against other potential raiders. A merger between Tecnost and Telecom Italia would dilute Olivetti's stake in Telecom Italia to a low 30%. With



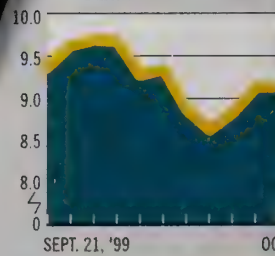
INVESTORS SHUN OLIVETTI...



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DATA: BLOOMBERG FINANCIAL SERVICES

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▲ SHARE PRICE IN U.S. DOLLARS

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deal, Olivetti's 51.9% stake in Telecom Italia remains intact.

Colaninno insists that it makes strategic sense to split the old, fixed-line operations of Telecom Italia from the high-growth mobile operations. Cut off from the cash flow and profits of TIM, Telecom Italia will be forced to restructure, says one insider. Colaninno also argues that Telecom Italia and TIM can continue to collaborate. "Telecom Italia doesn't need [to own TIM] to increase its value," he says. But analysts worry that Colaninno may be sacrificing long-term gain for short-term cash. Unless they own thriving cell phone and mobile Internet businesses, fixed-line telecom companies such as Telecom Italia will struggle to shore up market share and profits.

Italian fund managers also warn that a classic Italian power struggle may lurk behind Colaninno's sudden change of plans. The powerful investment bank Mediobanca, which is advising Olivetti, may be seeking to increase its influence over Telecom Italia. It's no secret in Milan that Mediobanca, which has a 2% stake in Olivetti, has long sought to bring Telecom Italia into its orbit.

ROMAN INTRIGUE. And the backroom dealing doesn't stop there. Telecom Italia's board was due to meet on Oct. 8 to consider Colaninno's plan. A week earlier, Colaninno went to a confidential meeting at Prime Minister Massimo D'Alema's office to explain the deal, since the government owns a 3.5% golden share in Telecom Italia. Treasury Minister Giuliano Amato and Olivetti advisers also attended. The meeting was immediately leaked to the press.

Sources close to Colaninno suspect the leak came from the staff of Amato, who is a political rival of D'Alema. The Prime Minister had backed Colaninno during the takeover. By embarrassing Colaninno, Amato's people sought to strike a blow at D'Alema. "We were caught totally unprepared. So we had to rush and bring forward the board meeting to the next day. Nobody was prepared, and we've seen the results," says an insider close to Colaninno.

Amato has threatened to use the government's shares in Telecom Italia to block the TIM transfer to Tecnost. D'Alema is insisting that Rome will let the market decide. If Colaninno sweetens his offer, the backlash could subside. But Olivetti's stumble and Rome's clumsy meddling are sure to keep investors wringing their hands about Italian markets for months to come.

By Gail Edmondson in Rome, with John Rossant in Paris and David Fairlamb in Frankfurt

COMMENTARY

By Carol Matlack

LIBERTE, EGALITE—AND EQUITIES?

When French tire maker Michelin announced plans to cut 7,500 jobs, Prime Minister Lionel Jospin blamed greedy shareholders. Michelin asserted that it was merely trying to regain its edge—and avoid bigger layoffs. Clearly, France is not the U.S., where restructurings are routine. But the uproar underscores another difference: The U.S. is a nation of shareholders, and France is not. Until that changes, restructuring in France will carry a political charge.

Half of American households own

French. The winners are foreign investors, who now own 45% of the market, vs. 35% three years ago.

More French shareholders would mean French companies would have to be more open and also pay executives based on performance. Companies are more likely to make such changes if shareholders who have the ear of French politicians want them. Most French favor Jospin's plans for a 35-hour workweek, which executives just protested in a mass rally. Fewer would favor the limit on hours if they held stock in companies

trying to comply.

Why don't the French buy shares? "It's mostly cultural," says a Bourse official. The French find stocks hard to understand and buy, he adds. The Bourse is spending \$3.2 million this fall to convince the French that buying stocks is easy.

Change can happen fast. It wasn't long ago that stock ownership in the U.S. was as narrow as in



PROTESTING: Execs don't want a 35-hour workweek

stocks directly, millions more through pensions. They benefit from restructurings that boost stock prices. In France, there are no private pensions, and the percentage of households owning equities is something like 12% to 15%. France is the only major democracy with more bureaucrats than shareholders. Individual share ownership actually fell during the 1990s—even as markets across Europe drew millions of first-timers.

France should join the crowd. Yes, buying stock means more risk. But now's the time for new thinking. The Bourse's CAC 40 index has tripled since 1996, as companies trimmed costs. It's up more than 18% this year. And who's cashing in? Not the cau-

France. The number of individual shareholders in Germany has doubled in the past three years. But the real push must come from government. Capital-gains taxes need to come down: The rate for equities is now about 50%.

The government says it will propose legislation allowing private pension funds next year. It's an important step. U.S. investors often get their first exposure to equities through pensions.

Getting the French into stocks would end the stale talk of greedy shareholders. But the real gains are larger. A equity culture would change the way France thinks—and grows.

Matlack covers French business from Paris.

More French shareholders would open the way to much-needed business reform

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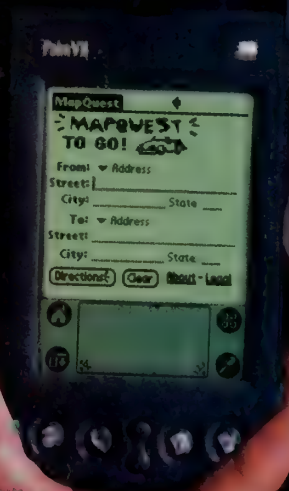
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ARGENTINA

MENEM MAY NOT BE READY TO FADE AWAY

The President defends his legacy and ponders running again

In his more than 10 years as President, Carlos Saúl Menem helped tame runaway inflation, lift barriers to trade and investment, and privatize state-owned enterprises from the telephone system to oil company YPF. But as Menem, 69, winds down his time in office, Argentina is suffering through its worst recession in years. On Oct. 24, voters will choose a new president: either Fernando de la Rúa of the opposition Alliance, who leads the polls, or Eduardo Duhalde of Menem's Peronist Party. On Oct. 5, at the presidential residence, Menem talked with Ian Katz, *BUSINESS WEEK*'s São Paulo bureau chief, about the election, his legacy, and his plans.

Q: Who's going to be the next President?

A: It's very difficult to make predictions. The opposition gives a double message. It says that [the Peronist party] destroyed the provincial economies. Then they go abroad and say they will respect everything that we've done regarding stability and the [currency].

Q: What is your legacy?

A: Ending the animosity between the military and civilians. We have buried once and for all the subject of *coups d'état*. We reformed the state, transferring to the private sector all the services the state had operated. We now have a market economy and rigid fiscal and monetary discipline. This government is the most successful in Argentina's history.

Q: What specific measures would you implement if you had more time?

A: I would deepen all the measures already taken, especially in the area of labor flexibility, to make more job creation possible.

Q: After two terms as president, you are prohibited from running again until you sit out a term. What are you going to do now?

A: I lead the largest party [the Peronists]. And I have serious aspirations to compete again [for the presidency] in 2003.



Q: If you were to be reelected in 2003, would you do anything differently?

A: I'd have to see how the next government leaves the country. If the future government continues our plans, we'll keep growing. But if not, if the government tries to return to the past, I feel pain for the future of Argentina.

Q: Argentina and Brazil are engaged in the most serious arguments over trade since the Mercosur bloc came into being. What's at the root of the tensions?

A: The devaluation of the real. It brought a series of distortions in trade that we're trying to resolve. But now, because of the continuous dialogue we have, we are resolving the situation.

Q: In Mercosur, many issues have

been worked out in emergency fashion. Will this continue to be the way?

A: What Mercosur needs is institutions like in the European Union, that would give the members of the bloc the possibility to work out their differences. But what is fundamental is a common currency for the region.

Q: Do you think the common currency should be the dollar?

A: The name isn't important. I hope it would be at parity with the dollar.

Q: Are you afraid that the new government will investigate you and members of your government on corruption allegations?

A: If there is a government that frontally attacked corruption, it is my government. We dismantled structural corruption by [privatizing] state companies where state workers, contractors, and suppliers got rich. Later [the opposition] said that while the people, the government did a campaign, there are poor people in Argentina. Now it occurs to them to talk about the presidential plane. Let them sell it! They hope that I go down with the plane.

Q: But could the new government bring a set of charges against members of the previous one?

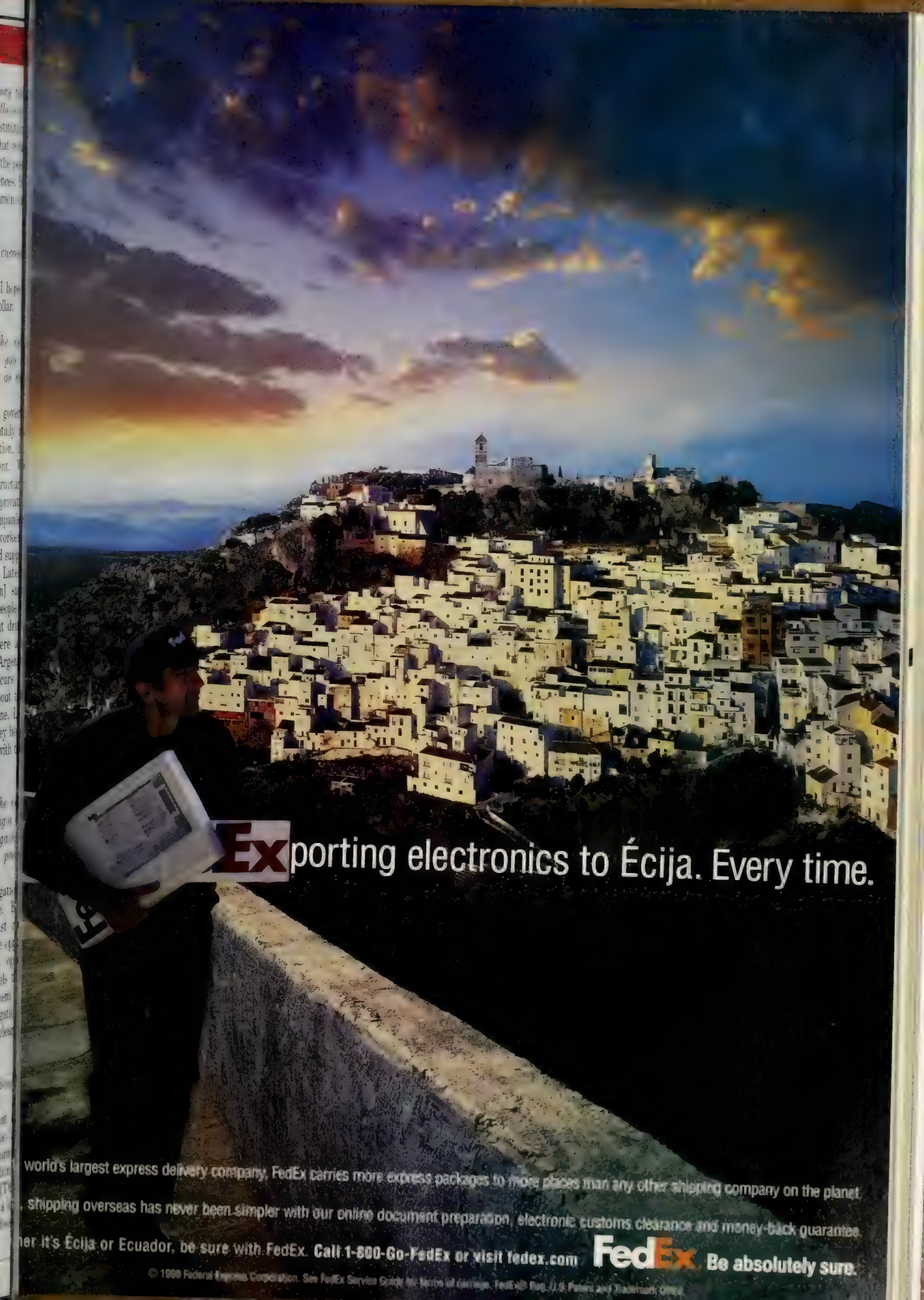
A: All the allegations have been made. Not only against the government. The opposition also has op-

cases. But if the opposition feels the need to make allegations, let them make them. There have been two allegations made against me, and I've been cleared of both.

Q: Should people worry about a devaluation of the Argentine currency?

A: We Argentines have seen that devaluation movie many times. The last time we saw it, we had 5,000% annual inflation. Now we have \$35 billion in reserves in the Central Bank. [That] gives us an enviable stability for a long time if the future government does not change the situation.

PRESCRIPTION
"What is fundamental is a common currency for [Mercosur]"



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EDITED BY PETE ENGARDIO

CHINA: DOES JIANG HAVE THE CLOUT TO TACKLE THE TOUGH JOBS?

With its menacing goose-stepping soldiers and communist kitsch, the Oct. 1 megaparade in Beijing may not have been the best symbol to show a world that is growing increasingly wary of Asia's rising superpower. But to Chinese President Jiang Zemin, the celebration of the People's Republic of China's 50th anniversary was a domestic public relations triumph. Along with floats honoring past leaders Mao Zedong and Deng Xiaoping was another devoted to Jiang—a play meant to elevate him into the pantheon of Communist Party greats.

The adulatory treatment suggests Jiang has the stature needed to initiate bold changes in China. But the propaganda machine may be delivering a false impression. The 73-year-old leader, who rose from relative obscurity to take the party helm after the 1989 Tiananmen Square massacre, finally consolidated his power. Yet he has little time left in office: Jiang is scheduled to step down as President in March 2003. And he faces so many limitations—technological backwardness of the military, the social repercussions of drastic economic reform, and his own cautious nature—that there is little reason to expect daring new solutions to China's problems.

WING FEARS. Jiang's role as a political weather vane is a potential hazard. He seems reluctant to—or simply unable to—undertake the messy and painful reforms needed to modernize China's troubled economy. And as domestic problems mount, Jiang has toughened his line on Taiwan, raising fears that the danger of a military confrontation will grow.

Recently, Jiang has softened the big push launched two years ago to clean up state-owned enterprises. Progress on writing some \$250 billion in bad loans at the state banks has been halting. And with prices falling and unemployment

on the rise, it's unclear where Jiang stands on how much market access China should concede in return for gaining entry to the World Trade Organization. One ominous sign: The slow-moving, conservative Trade Minister, Shi Gangsheng, is taking the lead in the WTO talks. Premier Zhu Rongji and other advocates for faster reform such as Long Yuntu, the relatively liberal trade negotiator, are playing second fiddle. Leaders "are not willing to take big steps," says a Chinese economist.

Jiang has proven adept at building his power base. Hu Jintao, a Jiang protégé, was recently appointed a vice-chairman of the powerful Central Military Commission. That makes him heir apparent to the presidency and testifies to Jiang's sway. Hu is best known for his tough tactics in Tibet before heading the Communist Party's leadership training school in Beijing.

Jiang can still expect imperial treatment—which he got from a *Who's Who* list of American executives at a Shanghai conference in September. Time-Warner Inc. Chairman Gerald M. Levin called Jiang "my good friend"—even though Beijing banned *Time's* special issue on China.

But this treatment does not translate into the kind of power Deng held. Even after he retired from his last senior position in 1990, Deng called the shots—and kept reform moving ahead. By contrast, many analysts view Jiang's increasingly harsh actions—from his repression of pro-democracy dissidents and the Falun Gong religious movement to his saber-rattling over Taiwan—as signs of frustration, not strength. "China has the smell of the end of dynasty about it," says Robert A. Manning, Asia studies director for the Council on Foreign Relations. And as China historians know, the dying years of a dynasty can be perilous indeed.

By Mark L. Clifford in Shanghai, with Dexter Roberts in Beijing and Sheri Prasso in New York



JIANG: His style is cautious

GLOBAL WRAPUP

ALLIANZ MAKES A BID

German insurer Allianz has long vied to bolster its \$360 billion fund-management business by expanding in the U.S. So on Oct. 6, it offered \$4.4 billion for Newport Beach (Calif.)'s Pimco Advisors Holdings, which boasts \$10 billion under management. Allowing Pimco would put Allianz on an equal footing with its French and Swiss arch-rivals AXA and Zurich Financial Services, which already have a strong presence in the U.S. The deal would also give Allianz ac-

cess to superior fund-management expertise, including Pimco's William H. Gross, one of the top fixed-income managers around. Such knowhow will come in handy in Europe, where the mutual fund and pension markets are predicted to boom over the next decade as governments scale back their social security provisions.

SHAPING UP IN BRUSSELS

► Romano Prodi is poking holes in Brussels' bloated bureaucracy. The new European Commission president

started by eliminating the stifling tradition of reserving top posts for certain nationalities. The French, for example, lost control of agriculture for the first time since 1958. Perhaps even more upsetting to the comfortable Eurocrats, whose salaries can run to nearly \$200,000 a year, is the loss of a juicy perk. For the first time, they will have to pay taxes on gasoline, cigarettes, and alcohol. Prodi advisers say this is only the beginning. More fundamental reform of the 20,000-strong bureaucracy will be announced at the end of the year.

PSST! WANT THE CPI NUMBER?

Soon the Web will be abuzz with economic rumors

Just when you thought that more than enough noise has been made about whisper numbers—Wall Street's inside buzz about what a company will actually earn as opposed to the "official" published consensus number from analysts—there's more. These rumors will soon be used to forecast everything from economic indicators to company revenues to the Dow Jones industrial average.

Indeed, whisper numbers are becoming more mainstream—and they have caught the eye of Big Business. Traditional research firms that are devoted to publishing analysts' consensus estimates, such as First Call, have recently started offering so-called whispers, which are little more than unofficial forecasts. IBES, another firm, will start offering them soon. And there are at least five Web sites that publish them. One, WhisperNumber.com, whose parent, Internet Financial Network (IFN), was recently acquired by Citigroup, offers whispers on earnings but soon will feature buzz on 27 economic indicators, such as gross domestic product, housing starts, producer price index, and consumer price index. The sites eventually will offer similar data for global markets, starting with Japan, Mexico, and Brazil.

ON THE MARK. "Whisper numbers sell, and Corporate America has figured this out," says Susan Watts, a finance professor at Purdue University and author of a study on them. "People think they're getting insider information that will give them an investing edge, and they're willing to pay for that information." Or at least the Web sites are willing to give the information out for free, hoping numerous hits to their sites will attract advertising dollars.

But coming up with a whisper for an economic indicator such as the CPI is

much more challenging than arriving at an earnings whisper. Experts tend to agree that earnings whispers are derived from one of three sources. The first is an analyst who tells his "best" clients that his projected number may err on the low or high side. The client then passes this information along. Second, sharp investors look at a company's earnings history, compare it with the consensus, and discover that the company beat consensus estimates for six quarters running by a penny. The whisper is that earnings will beat the consensus again by a penny. Third, word can come from company insiders—employees and investor-relations folks—who get the word out.

WhisperNumber.com says it uses proprietary software that scans the Internet for its info. "We get hundreds, even thousands, of whispers off message boards, chat rooms, and news groups," says Paul Hauck, a co-founder of WhisperNumber.com. But because there are likely to be far fewer messages on economic data, experts say, it's more difficult—some say impossible—to arrive at a whisper that truly reflects what the smart money is thinking.

Whispers do, in fact, give investors a trading edge—at least when it comes to the buzz on earnings. According to the study by Watts and two other professors, Mark Bagnoli from Purdue and Messod D. Beneish from Indiana University, whisper numbers are more accurate than analysts' consensus forecasts. The team looked at numbers on the message boards of such Web sites as Silicon Investor, Motley Fool, and Yahoo! Finance for two years and found that although whispers gleaned from the Net tended to be too high, they were a lot closer to actual earnings than were analysts' estimates.



Experts say that whispers on the economy always have existed, but not before has there been a central place to publicize such numbers. "If you go to a Salomon trading desk and ask a bond trader, he'll tell you the whisper on the consumer price index. When earnings aren't driving stocks, people look to other areas, like economic indicators," says Hauck.

Some traders and money managers say that they would dearly like to have such information. Matthew Johnson, who is head of Nasdaq trading at broker Lehman Brothers Inc., says: "If it proves to be more accurate than the

So-called whisper numbers about profits are more accurate



HOW THE WHISPER NUMBER COULD AFFECT THE MARKETS

1. Suppose the consensus estimate of economists for the consumer price index indicates that it will increase by 0.2%, meaning there is relatively low inflation. The stock and bond markets stay strong.
2. Subsequently, the whisper forecast of 0.4% is posted on the Internet, indicating higher inflation than the consensus estimate.
3. Reacting to the whisper, interest rates rise, bond prices weaken, and stocks falter.
4. Actual CPI number comes in at 0.3%.
5. Because the actual number indicates lower inflation than the whisper, bonds rally, the stock market goes higher—even though inflation is greater than what the economists were projecting.

ternet is having an effect on the way we evaluate stocks and the market at large. You have to wonder about the validity of opinions of Internet posters, but it is a way to gauge the sentiment of numerous investors," says Jeffrey Heisler, assistant finance professor at Boston University.

Indeed, experts say that as whisper numbers on economic data become more widely used, they will become a driving force in the overall stock market. For example, if the economists' consensus estimate for the monthly number of new hires is a tepid

more accurate than the forecasts of economists. "Over the past decade, economists have consistently overstated inflation figures while understating employment figures," says Michael D. Boldin, senior economist for Dismal.com, a Web site that focuses on the economy, and a former senior economist at the Conference Board.

POPULAR OPINION. "Since whispers on earnings have proven to be more on the mark than the analysts' consensus, we think these may be, too," says Jack L. Rifkin, executive vice-president of Citigroup Investments Inc. Rifkin, who is on the board of WhisperNumber.com, believes whisper numbers gauge investor sentiment, which largely drives the market.

Moreover, Rifkin says that economic indicator rumors will be especially effective at picking up trend reversals. "If polling is done properly, the popular sentiment should pick up a change or inflection point before economists do," he says. "Economists typically rely on past performance of an indicator rather than the current environment."

In several months, WhisperNumber.com will also feature unofficial forecasts on stock indexes, such as the Dow average and the Standard & Poor's 500-stock index. The site will also report whispers on the revenues of highly priced Internet companies that have yet to post a profit.

In the final analysis, the success of economic indicator whispers will depend on how accurate they are compared to economists' forecasts. Considering the record of economists, that's not much of a high hurdle. Economic whispers may be the new buzz on Wall Street.

By Marcia Vickers in New York

numbers, they could give you a leg up, especially if you get them in advance. I'd be willing to pay for them."

WHISPER MARKETS. There's another reality investors like whispers: Studies show that they are increasingly disbelieving of Wall Street and the advice of economists. "A bank economist may give a different view because his bank holds a position in bond futures. Investors are waking up to this," says John R. who is WhisperNumber.com's co-founder.

Whisper numbers are proliferating because of the Internet. "The In-

100,000, stock and bond markets would stay strong. But if the whisper number, expected to come out two weeks prior to release of the actual data, is 300,000, the markets would most likely take it on the chin. If the actual number comes in at 225,000, both the stock and bond markets would rally. Those who looked only at the consensus number would be mystified. But they wouldn't be in the know. The markets would rally because investors were expecting a higher, inflation-generating figure.

WhisperNumber.com's founders could be on to something—especially if economic indicator whispers turn out to be

analysts' estimates, says one study

THE NO-NAME THAT'S SHADOWING SCHWAB

Canadian-backed discount broker TD Waterhouse is gaining on the industry leader

Franks J. Petrilli doesn't let much stand in the way of promoting discount broker TD Waterhouse Group Inc. to investors. When the firm's \$1 billion initial public offering in June conflicted with his long-planned wedding at New York's Windows on the World restaurant, the Waterhouse president knew what to do. "I flew in Saturday morning, got married Saturday night, and flew out Sunday morning," says Petrilli. "Couldn't take a honeymoon."

Petrilli has reason for such fanaticism. Although hardly a household name, his scrappy New York brokerage firm is coming on strong. Based on U.S. online trading volume only, Waterhouse shares third place with Fidelity Investments, behind E*Trade Group Inc. and industry titan Charles Schwab & Co. Schwab has three times as many accounts as Waterhouse's 2.1 million, and \$600 billion in assets under management vs. Waterhouse's \$113 billion (table, page 186).

But Waterhouse, whose discount strategy is close to Schwab's, is far outpacing Schwab in account growth. Since mid-1998, Waterhouse has boosted its account tally 41%, while Schwab has grown just 19%, to 6.3 million. And based on total online and offline trades, Waterhouse is the No. 2 discount broker, claims the firm, due to the sizable business conducted in its branches and over the phone. Says Stephen D. McDonald, Waterhouse chief executive officer and Petrilli's boss: "We're closing the gap on Schwab."

To win investors, Waterhouse has launched a flashy \$100 million advertising campaign. Full-page ads broke in major newspapers on Sept. 22. By mid-October, actress Geena Davis, Los Angeles Lakers coach Phil Jackson, and former hoops star Kareem Abdul-Jabbar, among others, will be appearing in prime-time TV ads.

CLOSING IN:
Waterhouse's
McDonald (left)
and Petrilli



More substantively, Waterhouse offers \$12 trades, has 160 branch offices, 3,200 brokers, and a growing global presence. And it's offering one-stop shopping for brokerage and banking services because Waterhouse is a discount broker controlled by a bank, Canada's Toronto-Dominion. Since April, customers have been able to go online to operate checking accounts, pay bills, and set up lines of credit through an online affiliate, TD Waterhouse Bank. On Sept.

15, Waterhouse unveiled a service that lets customers switch funds between their bank and brokerage accounts; they can easily tap their checking accounts to buy stocks or mutual funds. "Among the major brokerage houses, it's unique," says Russell Keene, an analyst with San Francisco-based investment bank Putnam, Lovell, de Guzman & Thornton Inc.

Yet Waterhouse's weighty ad budget and ambitious expansion plans dom-

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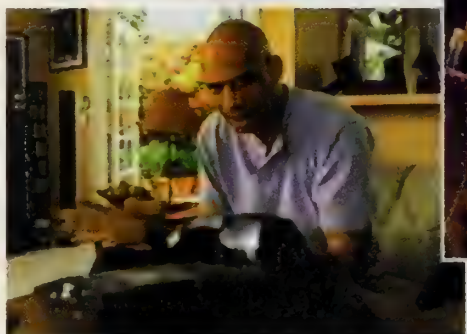
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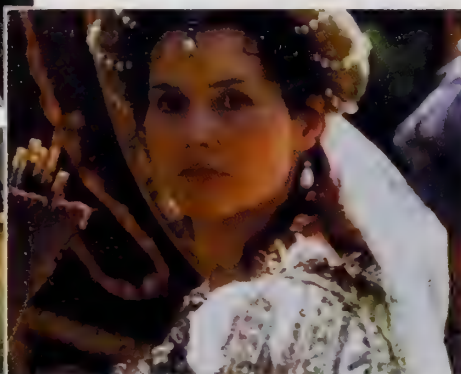
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Hardly a household name, Waterhouse has launched a flashy \$100 million advertising campaign to raise its profile among investors

SPOKESPERSONS (CLOCKWISE) JACKSON, DAVIS, AND ABDUL-JABBAR



200 by the end of next year. They act as permanent advertising, execs. Although Waterhouse now boasts at 1 million online accounts, 1.1 million customers prefer doing business in person at outlets such as one in New York's Waldorf-Astoria Hotel. They like dealing with the firm's 3,200 brokers—far more than online-only firms. "They're a good firm. They have emulated our strategy which keeps us on our toes," says Daniel Leemon, chief strategy officer at Charles Schwab & Co.

Of course, Schwab has been a far more powerful and innovative marketer than Waterhouse. The California giant, five years older than Waterhouse, braced big budget advertising long before it was popular among financial-services firms. And Schwab's 7,000 brokers at 310 retail sites give it a far more formidable presence than Waterhouse.

Waterhouse offers some features that its figures will steal a march on Schwab. Its \$12 tab for Net transactions beats Schwab's \$29.95 fee hands-down. Waterhouse's not as good as the \$4.95 that especially active traders pay with E*Trade, but Waterhouse executives argue that their higher level of service makes their price worthwhile. Watch the fine print, though:

cally and abroad will likely trim margins in coming months. That, and slower growth overall in online trading and big new online competitors, such as Merrill Lynch & Co., is why its stock has plunged to \$13½ a share, a far cry from its \$24 offering price on June 23. As investors see the discount brokerage world lately, Waterhouse is leading the pack down. While its stock is off 47% in the past three months, Waterhouse's rivals who do all their business online are off less—E*Trade is down about 34%. As for Schwab, it's down less than 33% and some analysts give the West Coast discounter a better shot at recovery. "Schwab is more than just an online broker. Schwab is really an asset-gatherer," says Richard K. Strauss, an analyst with Goldman, Sachs & Co.

EXEC FLIP-FLOP.

Waterhouse, at least, can afford to battle all comers. The firm, founded in 1979 by Lawrence M. Waterhouse Jr., who remains a director, is a product of acquisitions. Toronto-Dominion Bank paid \$526 million for it in 1996, then spent an additional \$312 million to purchase other discount brokers, chiefly in the U.S. but also in Australia and Britain. The investment has been a

stunner, since TD now owns 88.5% of an outfit with a market capitalization of about \$5 billion.

Plagued for a time with instability at the top, Waterhouse appears to have settled down. Petrilli, who built up the firm's online capacity over the past four years and served as its chief executive officer, quit suddenly in late July to take a top post at E*Trade after Canadian banker McDonald was installed over him. Then the 49-year-old New Yorker abruptly reversed direction in early August and was welcomed back by McDonald, 42, as his No.2. Petrilli says he was just exhausted and "vulnerable" to E*Trade's enticements after taking Wa-

CHASING THE BIG GUYS

	TOTAL ACCOUNTS	ONLINE ACCOUNTS	NET REVS.**	NET INCOME*	NO. OF BROKERS
FIDELITY	10.8† million	2.8 million	NA	NA	6,900
MERRILL LYNCH	8.0 million	NA	\$21.1 billion	\$2.4 billion	18,500
CHARLES SCHWAB	6.3 million	2.8 million	3.8 billion	575 million	7,000
TD WATERHOUSE	2.1 million	1.0 million	964 million	97 million	3,200
E*TRADE	1.24 million	1.24 million	515 million	(63 million)	352

* 1999 Estimates **Net revs.—net of interest and dividends † Includes mutual-fund accounts

DATA: PUTNAM, LOVELL, DE GUARDIOLA & THORNTON INC.; GOLDMAN, SACHS & CO.; U.S. BANCORP PIPER JAFFRAY; COMPANY REPORTS

terhouse through its public offering. He vows he's now back to stay.

McDonald is sticking to a basic "clicks and mortar" style—a potent mix of online and retail-outlet marketing. Like Schwab, Waterhouse holds that online services alone aren't enough. Waterhouse plans to increase its offices to

terhouse's online investors pay as much as \$45 to speak with a broker.

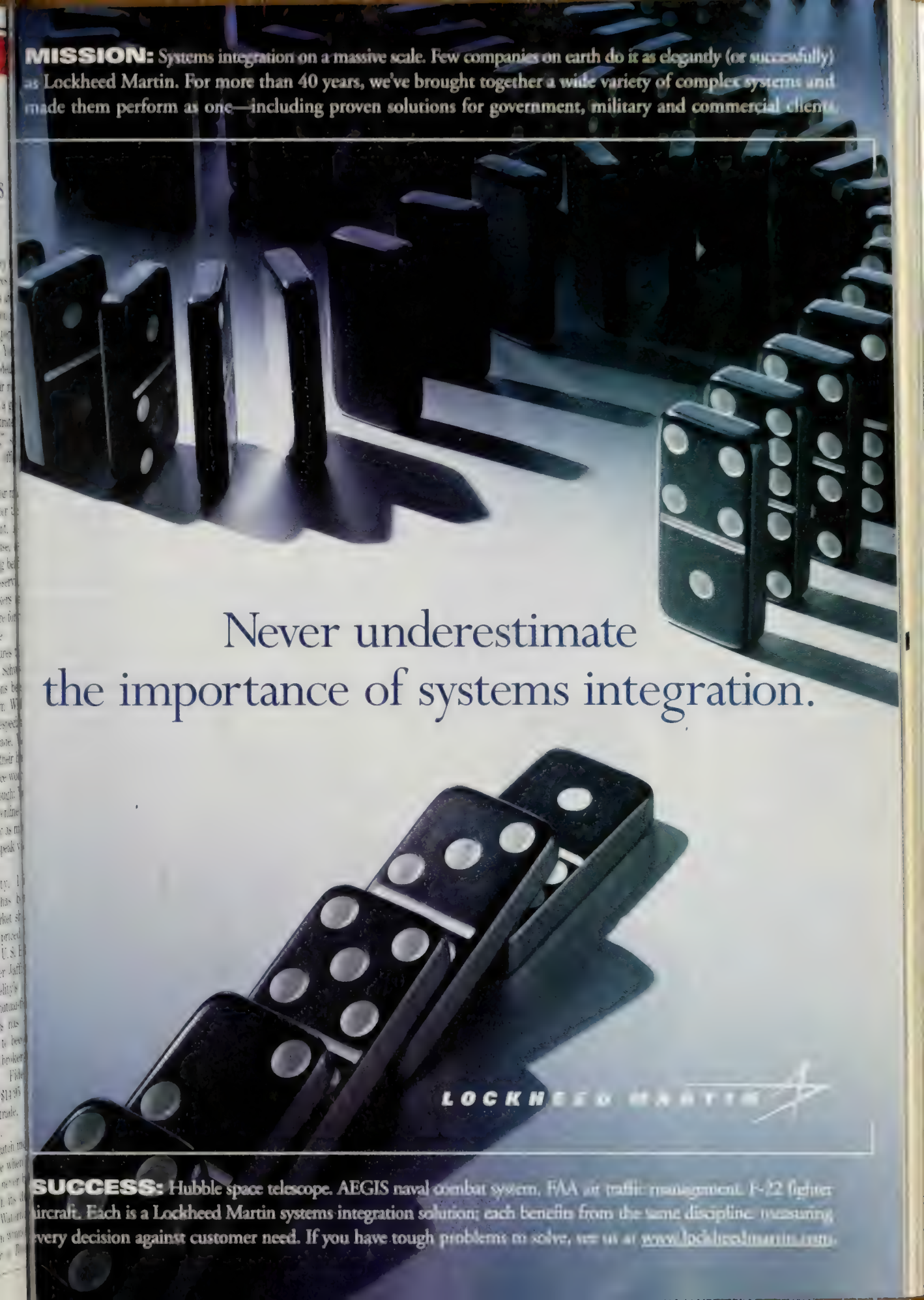
Fidelity, like Schwab, has been losing market share to lower priced rivals, says U.S. Bancorp Piper Jaffray. But Fidelity's base of mutual-fund customers has potential to become active broker clients. Fidelity charges \$14.95 for online trade,

much more than Waterhouse.

Waterhouse is trying to catch industry leader Schwab at a time when online brokerage world has never been more competitive. But with its deep-pocketed Canadian parent, Waterhouse may be one of the long-term winners.

By Joseph Weber in Toronto

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STOCKS

NOT EXACTLY A COMEBACK KID

Shares of money manager UAM struggle to catch the market

When the stock market sneezes, the stocks of money managers catch cold. So it's no surprise that shares of United Asset Management, the Boston-based holding company whose 45 affiliates manage \$200 billion in assets, have been getting whacked. During the third quarter, as the Standard & Poor's 500-stock index sank 6.6%, UAM plunged 16.4%. But that's the least of it. The stock, at 19%, is no higher than it was four years ago, and it has underperformed other publicly owned money managers (chart) and the stock market during one of the best decades ever for equity investing.

UAM's troubles stem, in good part, from the way Norton H. Reamer, founder, chairman, and CEO, structured the company as a loose federation of affiliates with little incentive to continue to build their individual firms.

Reamer also largely bought firms that serviced slow-growing defined-benefit pension plans, rather than the faster-growing defined-contribution and mutual-fund businesses.

"PROVE IT." Adding to the downward pressure on the stock were the recent woes of Julian Robertson's Tiger Management LLC, which was a 15.8% shareholder in the company as of June 30. With its hedge funds down 23% this year, Tiger has been hit with redemptions—about \$1.5 billion in the last quarter alone—and that has likely led to sales of its holdings in UAM.

Reamer launched an initiative last year to improve the company's performance and says he sees progress. The stock, however, has continued to sink. "You can't blame shareholders for having a 'prove it' attitude," says Reamer, who owns about 3.7% of the shares himself.

GETTING COZY: CEO Reamer works more closely now with affiliates

Reamer shifted UAM's emphasis from growth by acquisition to internal growth. To make that happen, UAM, once a hands-off owner, is getting actively involved with its affiliates. The parent company now has a cadre of executives that, says Reamer, "get cozy" with the affiliates, suggesting ways to address problems. UAM now also makes investments alongside the affiliates to improve marketing, client service, and technology. In the past, affiliates often skimped on reinvesting in their businesses because they bore all the cost.

UAM owns 100% of the equity in its affiliates and earns its money through a revenue split. And that, say some, is a source of the

company's troubles. "UAM needs a better way to align the interest of the affiliate and the parent," says analyst La Sondi of Franklin Mutual Advisors, which, with 16.3% of the stock, is the largest shareholder.

SLIMMING DOWN? Reamer's comeback plan also makes use of corporate cash flow—about \$190 million after interest and taxes—to buy back stock. In 1996 and the first half of 1997, shares outstanding had fallen by 15%, to 59 million. Still, the stock trades at a price-earnings ratio that's one-third below the S&P 500, and its price is so low that an 80¢ annual dividend works out to a 4% yield, which values the shares like utility. The stock has been so cheap that it attracted some well-known bargain hunters like Franklin and Robertson.

Investors may get a sense of what Reamer's plan is working when earnings are reported on Oct. 21. Analysts are forecasting a profit of 25¢ a share, 2¢ below last year. But what really counts is client cash flow. That figure

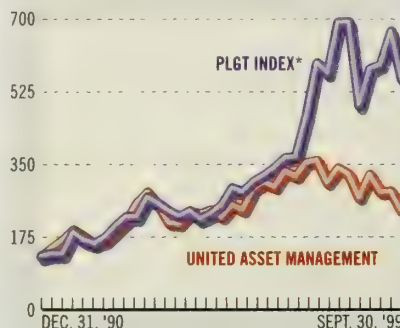
has been negative in 21 of the last 24 quarters as clients have pulled \$63.4 billion more out of UAM units than they have put in. Still, assets under management have more than doubled, to \$1.5 billion, during the period through acquisitions and market appreciation.

The second quarter's outflow of \$2.7 billion, a slight improvement over the \$6.5 billion outflow in the first quarter. "The third-quarter

flows won't be positive, but they should be better than the second," says Alexander Paris Jr. of Barrington Research Associates, a Chicago institutional research firm. UAM officials decline comment on estimates of client cash flow. Outsiders say UAM needs to slim down by selling some affiliates. UAM nearly sold its Pilgrim, Baxter & Associates unit for a reported \$500 million to \$600 million last year, but the deal fell through, and insiders say it's on the block. Still, the market now values UAM equity and debt at just \$2 billion. There's no question the sum of the parts is worth a lot more than the whole. Reamer's challenge is to change that math.

By Jeffrey M. Laderman in Boston

CAN UAM REVERSE ITS STOCK'S FALL?



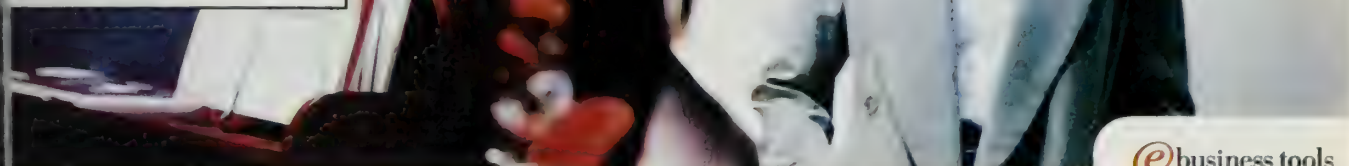
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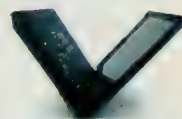
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COMMENTARY

By Gary Weiss

LET'S SHINE SOME LIGHT ON HEDGE FUNDS

It's fast becoming a fading memory. Only a year ago, the financial world was reeling from the meltdown of Long-Term Capital Management. The threat of regulation loomed for hedge funds—unregulated investment partnerships that, like LTCM, often use leverage to boost their returns. But when the smoke cleared, the regulatory response to the LTCM crisis turned out to be a lot of talk, some “working group” studies—and no action.

That's not surprising. No “second LTCM” has reared its head. After all, the vast majority of hedge funds are small in size and rarely use sophisticated strategies. But the largest funds are in another league. The Quantum funds of George Soros, Julian Robertson's Tiger hedge funds, and the megafunds run by Louis Bacon, Bruce Kovner, and others can move the world financial markets. A

The very idea of disclosure is anathema to most hedge funds

bad year can result in massive redemptions, which can lead to billions of dollars in asset sales—as lately have plagued the Robertson funds, down 23% this year (BW—Sept. 27).

OUTRAGE, ANYONE? With the megafunds continuing to pose a danger to the markets, the continued regulatory inaction is starting to resemble complacency. Gone is the sense of outrage that permeated the markets a year ago. Back then, the vaunted ability of the free markets to regulate themselves came a cropper. Says Representative Richard H. Baker (R-La.), chairman of the House capital markets subcommittee: “If you were to rely solely on traditional market wisdom, where was it when LTCM fell?”

A good question—and one to which Baker has proposed an answer that deserves consideration. On Sept.

23, the one-year anniversary of the LTCM crisis, Baker introduced a bill that, for the first time, would require the largest hedge funds to provide regular public disclosures of their positions—including their use of leverage. The Baker bill would enact as legislation the findings of the President's Working Group on Financial Markets, which produced a report on the lessons of the LTCM affair last April. The legislation would affect only the largest hedge funds, defined in the bill as containing capital of \$3 billion or more, or belonging to “fund families” with assets of at least \$20 billion.

The bill would require only modest disclosure.

To no one's surprise, the Baker bill has not won many friends in the secretive hedge-fund business. The very idea of disclosure is anathema to most hedge funds, which usually keep their investment strategies, and client lists, closely held secrets. George E. Crapple, a hedge-fund manager who is chairman of the Managed Funds Assn., a hedge-fund industry group, feels that quarterly disclosure wouldn't prevent a future LTCM. Instead, the MFA feels lenders should voluntarily tighten credit standards and open up lines of communication among themselves, so they are not



caught unaware when problems crop up—as happened with LTCM last year.

But increased oversight by financial institutions is not enough. The events of a year ago proved how terrifying it can be when the financial community lets its guard down. Baker's proposal is not perfect, but it includes some savvy provisions and would regulate offshore funds with U.S. investors, thereby heading off the bogus “they'll all go offshore” argument used by critics of regulation. Above all, it's a start. Congress needs to act now—and not wait until the next pinstriped train wreck.

Senior Writer Weiss has written extensively about hedge funds.

FASTER, FASTER, FASTER

Companies are giving Net users what they demand: Speed

Robert E. Knowling Jr. understands there's no time for caution in the race to deliver ultrafast Internet access. So in June, the chief executive of Covad Communications Group in Santa Clara, Calif., huddled with top executives and challenged them to "blow away" the company's ambitious 51-city coverage plan. In two days of scribbling ideas on flip charts, they settled on a new plan—announced in early September—to reach

100 of the top U.S. cities by 2001, bringing split-second Net access to 40% of the homes and businesses in the country. Says Knowling: "This is about winning in the marketplace."

Hold onto your modem. Knowling's call to arms at Covad reflects a new urgency among Internet carriers across the country. In the coming months, telephone, cable, wireless broadband, and satellite companies will push harder than ever to reach customers thirsting for fingersnap-

fast connections to the Net. Sprint Communications Inc. is planning to pump several billion dollars into a four-year plan to extend well beyond its early goal of providing digital subscriber lines, or DSL, service to 10 million customers by yearend. The new target: 50 million customers within four years. Meanwhile, Bell Atlantic Corp. is accelerating its roll-out of DSL service, aiming to double the number of customers, to 21 million, by early 2000. All told, by 2002, nearly 80% of U.S. households will have access to speedy broadband links, up from about 40% today, according to researcher Dataquest Inc.

CRUISING. Why the surge to speed? Demand. The percentage of households online will climb from 31% now to 54% in 2002, predicts market researcher NxGen Data Research. Fueling this demand is the boom in new devices that can cruise the Net—from WebTVs to palmtop computers. And Internet access providers want their share. That's why broadband carriers are rushing to deliver services

HIGH-SPEED HOTBEDS

The demand for speedy Net access is taking off. According to market researcher NxGen Data Research, by the end of 1999 over 766,000 homes in the U.S. will have high-speed connections, swelling to 17 million by 2003.

NEW YORK/BOSTON Tech meccas in the northeast where telco Bell Atlantic is aggressively marketing DSL to its 20 million customers. It has competition from Cox cable, which has blanketed Rhode Island with cable systems.

SAN FRANCISCO BAY AREA

This region has emerged as the most competitive. High-speed Net access was kick-started in 1996, when @Home launched its cable modem service in the suburb of Fremont. DSL carriers Pacific Bell and Covad, and Northnet enhance the options.

CHICAGO Ameritech has been slow to deliver DSL, but merger partner SBC will hasten deployment in 2000. Still, several regional players offer DSL and cable modem service throughout the midwest.

DIGITAL SUBSCRIBER LINE

Digital Subscriber Line (DSL) service uses the copper wire of today's phone system. Whizzy electronics let wires handle much more data than in the past—speeds up to 100 times greater than a 56-kilobit modem. Prices vary from \$40 for consumers to \$250 per month for businesses.

CABLE MODEMS

Cable Internet service zips data into homes over the same TV wires that deliver MTV and ESPN. It costs about \$40 per month on top of regular cable charges and includes a cable modem. Cable modems deliver data more than 100 times faster than today's speediest 56-kilobit modems.

AUSTIN Time Warner offers cable modem service to 358,000 homes here while TCI has made Dallas a target. Plus, there's a bevy of DSL providers in Texas from local Bell SBC to Covad, which has just entered the region with 1,000 lines.

FLORIDA/GEORGIA Sprint has targeted Orlando with its DSL service and Time Warner has made the city a test center. Bell South does big DSL business here as does Internet service-provider Mindspring. Media One is making a run at the cable modem market.

and for the first time are getting ready to pepper the market with brand-building ad campaigns. "What's lighting up the interest is that companies are starting to understand just how powerful these new [broadband] networks can be," says Catherine M. Hapka, CEO of Rhythms NetConnections Inc., a DSL provider in Englewood, Colo.

So far, cable operators lead the broadband race. Strong in residential areas, cable companies have lined up more than 560,000 users to date, about half the entire broadband customer base in 1999, according to NxGen. But by 2001, that's going to change, and customers will have plenty of choices (page 194). Not only will the telecom companies grab a considerable share of the broadband market, but satellite services such as DirecTV and fixed wireless companies that beam data via radio waves, are expected to nab a chunk of customers, too. The upshot: telcos will dominate the business market, and cable operators will keep a narrow lead in the home.

That won't happen overnight. First, service providers have to upgrade their broadband networks. Today, only about 30% of the homes in the country are cable-modem ready. Cable companies have to transform old, one-way cable systems into robust two-way data highways. AT&T, owner of TCI, is spending \$15 billion on its TCI cable system. Once the lines have been upgraded, cable ser-

vices such as Excite@Home and Road Runner hook cable modems to the newly robust pipes and your PC.

Telephone companies are hot on cable's heels. In 1999, telco shipments of DSL gear, which splits voice and data signals and zaps them over copper-wire phone lines, will skyrocket more than 900%, to 400,000 units, says Strategis Group, a research firm in Washington. Like SBC and Bell Atlantic, GTE Corp. is pouring \$25 million into its growing system this year. "If the existing service providers don't

The hinterlands are expensive for cable and telcos. Enter wireless broadband

meet the growing need for speed," says Jeffrey M. Bolton, GTE's director of DSL programs, "other providers will."

That's why both cable and telephone companies are busy working to overcome the limitations of their networks. Cable pipelines are shared, making them sluggish when too many users crowd on. So cable operators are extending network gear deeper into neighborhoods, dropping the number of homes sharing bandwidth from an average of

1,000 to as few as 50, says Patti Ali, a cable analyst at Dataquest.

Telephone carriers are scrambling to find ways to deliver service to customers more than 3 miles from a central office. These offices store the DSL gear that opens up a high-capacity pipe for the delivery of data to the right home, giving them an Internet connection that is always on. Beyond 3 miles, service is unreliable.

Simply put, the hinterlands are expensive for telcos and cable operators to reach. Enter wireless broadband. Satellite services DirecTV and EchoStar are beginning to beam a bundle of popular Web data to be stored on PC and set-top boxes. Companies also are installing radiowave towers that stream data to wireless receivers on homes. Sprint, for example, has spent \$1.3 billion for speedy fixed wireless access to 30 million U.S. homes.

THE BIG GUYS. Carriers are turning their attention toward marketing campaigns and building richer services. Next year will bring a rush of pay-per-view TV, and radio ads. Covad will shell out nearly \$50 million on a campaign dubbed "The Internet as it should be." "When all is said and done," says Robert Roblin, Covad's executive vice-president for marketing and sales, "this will be a game of who has the strongest brand."

True, but the heavyweights of the cutthroat contest will have to do

The Broadband Scorecard

The need for speed has spurred both cable and telecom companies to accelerate their high-speed data offerings in a race to reach as many customers as possible. Here's how the major players stack up:

	SERVICE	ENTRY PRICE	SPEEDS	TARGET	CUSTOMERS	MONEY MARKET
EXCITE@HOME	Cable modems	\$40/month	128 kbps to 1 mbps	Residences	620,000	89
ROADRUNNER	Cable modems	\$40/month	128 kbps to 1 mbps	Residences	400,000	25
RHYTHMS NETCONNECTIONS	Digital subscriber lines	\$59/month	128 kbps to 7.1 mbps	Large and small business	3,250	45
COVAD	Digital subscriber lines	\$59/month	128 kbps to 7.1 mbps	Residential and business	29,000	51
SBC/AMERITECH	Digital subscriber lines	\$39/month	640 kbps down, 90 kbps up	Residential and business	32,000	51
BELL ATLANTIC/GTE	Digital subscriber lines	\$39/month	640 kbps down, 90 kbps up	Residential	Not available	6
U S WEST	Digital subscriber lines	\$39/month	640 kbps down, 90 kbps up	Residential	70,000	40



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than promote their name. Improving the installation process is key. That's why Bell Atlantic unveiled a do-it-yourself installation kit in July. It costs \$100, the same price the company charges to send service reps, but customers aren't forced to wait. Road Runner is testing a similar program for cable-modem hookups in Minneapolis. "Everyone in the world is too busy to sit at home and wait for someone to come by," says Bell Atlantic COO James G. Cullen.

So far, speed has been the big advantage of broadband services. But a handful of carriers believe customers

will demand a greater array of services. Tomorrow's homes will put the Jetsons' to shame—with voice, video, and data flooding the dwelling. Sprint Corp.'s ION network, for example, is designed to allow phone calls and computer Web chats simultaneously. Sprint will unveil its ION network to consumers in Denver, Kansas City, and Seattle in December.

Richer services and faster connects are redefining how and where employees work. With traffic at a crisis point in California, employers are looking for affordable ways to let staffers work from home. Software maker PeopleSoft Inc.

in Pleasanton, Calif., bought about DSL links from SBC's Pacific Bell. Now its employees can connect from home using a broadband program it calls "pe pipes." At about \$100 a user, the connections cut a tenth off the cost of traditional fast pipes offered by the phone company, says Neil P. Hennessy, PeopleSoft's director of global communications. "It hums big time," Hennessy says. Broadband carriers duke it out, companies such as PeopleSoft, and their employees will be the real winners.

By Roger O. Crockett in Chicago with Catherine Yang in Washington

WHERE TO FIND WARP SPEED

If you're wondering why you need a super-speedy, always-on connection to the Internet, consider the recent plight of Albert A. Paone. A year ago, the home-based day trader of stocks eyed subtle movements in Infoseek Corp. stock on his computer and prepared to sell the bulk of his 2,500 shares. But when Infoseek began a nosedive from its \$80 mark, Paone's Internet service took just that moment to knock him off the Net. By the time he logged back in, the stock had dropped to \$70—costing him tens of thousands of dollars. "I needed a line that wasn't going to crap out on me," Paone fumes. That's why Paone became one of nearly 700,000 residential subscribers to high-speed broadband services in the U.S. this year. By 2003, that number is expected to soar to 14.7 million.

So how do you move into the fast lane for Internet access? And which service is best for you? Today, consumers can choose from a handful of options: the telephone carriers' Digital Subscriber Line (DSL), cable modems, data satellite, and fixed wireless services. While each technology offers the same promise—a superfast, always-on link to the Net—they vary in speed, price, reliability, and availability.

FEW CHOICES. First off, find out what choices you have. High-speed Net connections are not available everywhere. Big cities are the hot spots, and even there, competition only exists in certain neighborhoods. Paone, for example, first looked into cable modem service. While Tele-Communications Inc. offered it, the broadband technology wasn't available on

Paone's block. So he turned to DSL from GTE Corp. Tom Gale of Portland, Me., settled on a cable modem because in his neighborhood, "DSL was not an option," he says.

In select markets, such as the San Francisco Bay area, consumers can opt for two flavors of wireless technology: fixed wireless gear—a broadband service piped via radio frequencies to a pizza-box-like receiver at home; or satellite systems from DirectTV and EchoStar Communications Corp. that beam truckloads of data across the country to that dish on your roof. The trouble is, the satellite system is one way. So data going out—to a friend or the office—is pumped over a poky standard phone line. The bottom line: Neither fixed wireless nor satellite service is expected to compete heavily with DSL and cable modems.

That leaves cable modems and DSL as the dominant choices. But each of these has its drawbacks. In most cable systems, a thick portion of the cable is set aside for files you want to zap across the Net. The rest is used for conventional television channels. If you are the only person using the system, you can download data at 30 megabits-per-second (mbps), a whopping 540 times faster than today's 56-kilobits-per-second modems. But in reality, cable lines are "shared" by as many as several hundred users. So during peak times—such as after dinner—download speeds can plummet to a disappointing 100 kbps.

The most widely available alternative to cable modems is DSL. It uses the same wires that carry phone calls. These wires can't carry the bandwidth of cable, but most entry-level services today hit speeds of 384 kbps—nearly 10 times as fast as today's typical modems. "I used to sit and wait for the pages," says Larry A. Feinberg, 46, a Bell Atlantic DSL user in Ardmore, Pa. "I don't remember those days anymore."

Hooking up these technologies can set you back as much as \$300. For now, companies are promoting installation for \$99, or even free. So nab some newfound Net speed. After all, nobody wants the World Wide Wait to be very long.

By Roger O. Crockett in Chicago, with Andy Reinhardt in San Mateo

THE FASTEST WAY TO THE NET

(Number of households in thousands)

CABLE MODEMS

1999: 558,446
2000: 1,617,611
2001: 3,158,383
2002: 5,392,356
2003: 8,319,799

WIRELESS BROADBAND

1999: 7,650
2000: 52,181
2001: 160,596
2002: 337,022
2003: 445,704

DIGITAL SUBSCRIBER LINES (DSL)

1999: 122,399
2000: 782,715
2001: 1,713,021
2002: 3,177,638
2003: 5,051,307

SATELLITES

1999: 11,475
2000: 78,271
2001: 214,128
2002: 674,045
2003: 891,407

DATA: NXGEN DATA RESEARCH INC.

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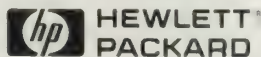
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EXPERIMENT: Cisco funding has given Stefan Krook's Glocalnet a leg up

TELECOMMUNICATIONS

CISCO'S TELECOM TWO-STEP IN EUROPE

It's bankrolling startups to build markets for its own gear

Two years ago, Stefan Krook faced a marketing challenge. The reed-thin Swedish entrepreneur, now 27, had launched a Stockholm-based company, Glocalnet, one of the first to offer telephone service over Internet technology. It was a tough sell, though. Voices sent as packets of data sounded distorted. Krook's solution was to focus on foreign workers living in Sweden, who soon made up 95% of his customers. "The sound was going to be bad coming from Somalia or Afghanistan anyway," he says. "They wouldn't care."

A wacky business plan? Not to Cisco Systems Inc. The world's No. 1 seller of Internet technology decided to woo the young entrepreneur. Last February, Cisco bought Krook's old equipment for about \$800,000. Cisco then leased its own equipment to Krook at subsidized rates. This gave Glocalnet a run at the telecom market for measly financing fees of \$1 million per year.

Now, Glocalnet has 40,000 customers, compared with 7,000 at the beginning of the year. And in mid-September, Swedish regulators granted Glocalnet

equal access, making it the first Internet telephony company in the world that customers can simply subscribe to, getting Glocalnet access without dialing lengthy access codes. "Now we can start growing seriously," says Krook.

Notch up another success for Cisco in Europe. The Silicon Valley company, with \$12.5 billion in sales and \$8 billion in cash, is bankrolling telecom companies across the Continent and equipping them with the latest Internet plumbing. They range from the Wind consortium in Italy to Euromap, an affiliate of Germany's Mannesmann, based in the Hague. Cisco's moves in turn are pushing Europe's large telephone companies, from Norway's Telenor to the Netherlands' KPN to

make bigger investments in Cisco equipment to stay up to date in data communications. This telecom two-step is driving 55% annual growth for Cisco in Europe, where its sales now top \$3.5 billion, or 28% of total sales. "Europe's our fastest growing market," says Bill Nuti, the company's president for Europe.

But before Cisco can create an adequate Internet telephony network, it must master the voice technology. Here, Cisco's interest in Stefan Krook. The young Swede started looking into Internet telephony while working a summer job at NETnet International, a Stockholm-based telecom company. He concluded that by breaking voice data into packets of data, the company could develop telephones along an entirely different business model. Only one problem: voices that sounded as if they were coming from outer space.

PLUNGING PRICES. In 1997, Krook founded Glocalnet. Since then, trends have gone his way. Net voice quality has steadily improved, while deregulation has reduced voice call prices by up to 75%. Analysts think rates will continue to plummet and soon be nearly free.

At Glocalnet, Krook plans to make money selling services, which are much simpler to manage when calls are transmitted as packets of data on the Internet. He sees the phone company packaging and transmitting people's data for transmission from computers to remote answering machines, cell phones, and digital telephones. Analysts agree that value-added services will bring in revenues as plain tariffs plunge. But they say Internet technology is not ready to serve the telecom companies. "It will be another year before the systems are ready," says Scott Moore, an analyst at International Data Corp. in London.

For Cisco, the Swedish startup is a valuable experiment. "They're our

CONTINENTAL CAMPAIGN

- Encourage startup phone companies by providing them with the latest Internet technology at subsidized prices
- Work with them to develop voice transmission on the Net to rival that offered by such traditional phone-equipment suppliers as Alcatel, Ericsson, and Siemens
- Increase sales to telecom companies as the new competition forces them to spend more to stay current in fast-growing data-communications market

case," says Cisco's Bill Nuti. The logic is that if Glocalnet makes money from Internet telephony in a tough market, scores of other European telecom companies will follow suit. With that in mind, that big, Krook expects Cisco to answer his Internet phone calls—even if they sound uncanny for the next year or two.

By Stephen L. ...
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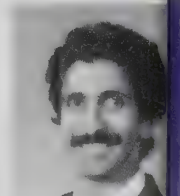
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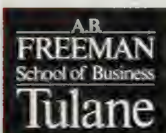


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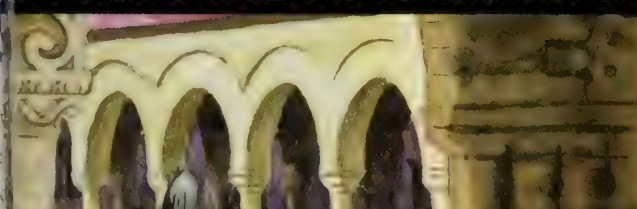
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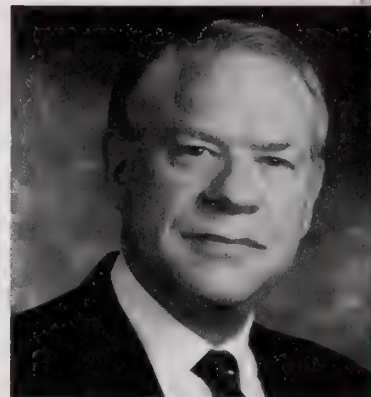
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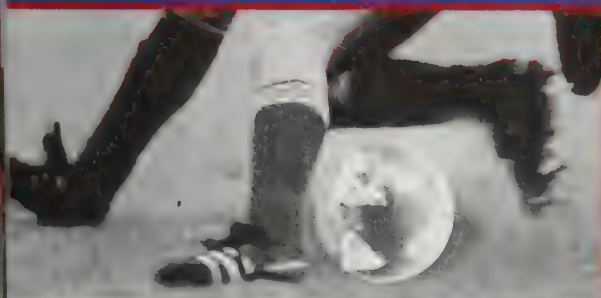
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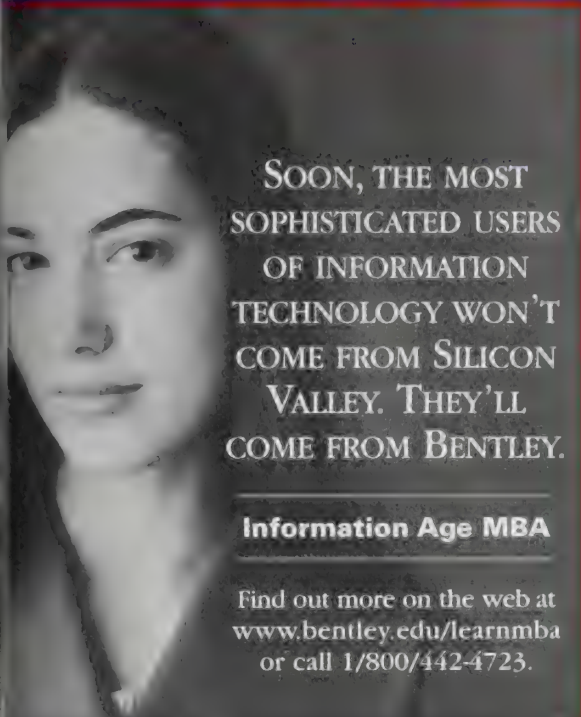
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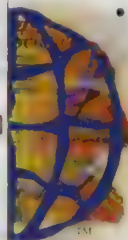
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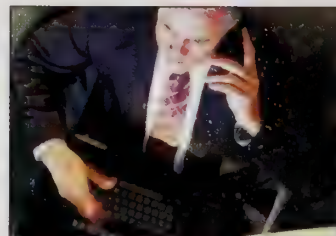
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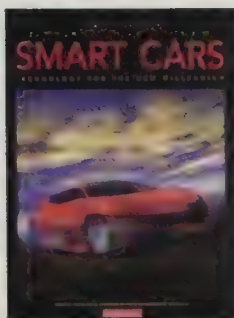
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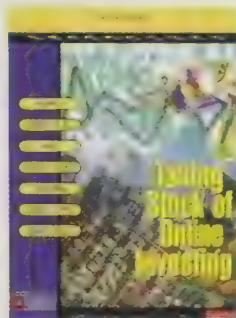


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BUSINESSWEEK LIFESTYLE



Avoiding the Day-Care Nightmare

Good centers can help kids flourish. Here's how to find them

BY ANNE TERGESEN

When Ed Sager pulled his son, Ian, out of one day-care center and enrolled him in another, the Ballston Spa (N.Y.) resident was amazed at the difference the move made. Almost immediately, the toddler's vocabulary exploded, and his concentration improved. "He loved to talk about the things he did during the day, whereas at the previous place, you had to hammer it out of him," Sager says.

Unfortunately, when it comes to child care, quality is in short supply. Only 11% of the 1,103 families in a 1997 study by the Washington D.C.-based National Institute of Child Health & Human Development were judged to have excellent child care. An additional 32% of the arrangements were rated good. But 51% were deemed fair, and 6% were considered poor. Qual-

ity is in especially short supply among day-care centers, the study found. That's significant because high-quality day care can promote a child's thinking, language, and social skills.

Indeed, the NICHD found that among 3-year-olds in child care at least 10 hours a week, those in day care had better cognitive and language skills than those cared for by relatives and babysitters. Good group care also was linked to fewer reports of problem behavior at age 3. "A high-quality day-care center is your best bet for

good cognitive and language development," says Margaret Tresch Owen, a University of Texas at Dallas psychology professor who contributed to the study.

When it comes to day-care centers, a good place to start is with accreditation. At least four organizations give their stamp of approval to early childhood programs that meet high standards, such as high ratios of staff to children

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www.nafcc.org

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NATIONAL EARLY CHILDHOOD PROGRAM

800 505-9878

www.nccanet.org

Accredits day-care centers

NATIONAL SCHOOL-AGE CARE ALLIANCE

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www.nsaca.org

Accredits after-school programs

NATIONAL RESOURCE CENTER FOR HEALTH AND SAFETY IN CHILD CARE

800 598-KIDS

nrc.uchsc.edu

Lists state licensing requirements

(table). This credential is in addition to licensing (requirements vary by state). Still, accreditation is voluntary, and only about 6,000 of the nation's estimated 90,000 to 102,000 day-care centers are certified by the National Association for the Education of Young Children in Washington. Although accreditation seems to protect against the worst programs, it does not guarantee the highest quality. A 1996 NAEYC study of 92 programs rated 61% of those with accreditation good or excellent. None was deemed poor, but the remainder were fair.

Even if a program is accredited, parents should visit for an hour or more to make sure that it satisfies their standards. Ask for a tour and sit down with the director. One key issue is hygiene. Are toys scrubbed daily? Do teachers wash their hands after changing diapers? Then, ask about staff turnover. Centers that provide benefits and higher wages are better able to reduce defections, which threaten child development by severing the bonds that kids form with caregivers. Margi Walsch switched her 26-month-old twins, Katelin and Megan, from one suburban Pittsburgh center to another after the girls had at least nine teachers in nine months. "We would start liking them, and they would leave," Walsch complains.

YARDSTICKS. Her experience is not unusual. With unemployment low and salaries for the best-paid staff languishing at about \$19,000, 31% of the nation's day-care workers left their jobs in 1997—the most recent year for which figures are available, the Center for the Child Care Workforce says. That's up from 26% in 1992.

Another yardstick of quality is the ratio of staff to children. Although state rules vary, the American Academy of Pediatrics recommends one adult for every three infants, four 2-year-

olds, and seven 3-year-olds. Programs also be able to articulate a child-care phy. Debra Lazarus, a day-care teacher years who works near Boston, recommends that are flexible enough to tailor acti the childrens' interests.

Open-door policies that permit parents and go anytime are another must. Kennedy-Spaen discovered when a sur Boston center told her she could stay minutes after dropping her infant son, Evan said it helped with the

THE KENNEDY-SPAEN

Eve wanted a center an open-door policy

sition for the kids," ne cupational therapist. "But I wanted to make he was safe and fi what his day would be. Instead, Kennedy placed Evan on waiting at two centers with door policies. Some even install cameras. ents can monitor th via the Internet.



Quality programs aren't necessarily cheap. In 1998, the average cost of day care ranged from \$4,000 to \$10,000, according to the Child Defense Fund. But the best programs fall on the higher end of the range. Ask your employer has a flexible spending plan defrays some of the cost by allowing you pre-tax money to pay the bills. But before tuition, spend time in the classroom. A teachers might be on their best behavior hard to sustain a false impression for long. Cathryn Booth, a professor at the University of Washington and an NICHD study contributor.

When compiling the NICHD study, Booth and her colleagues devised a system to judge quality of interactions between children and teachers. Their criteria can serve as a checklist for comparing centers—or any form of care. Observing, look for instances in which caregivers respond to or ignore fussing or crying. Ask if a teacher smiles at, listens to, asks a question of, or responds verbally to a child, or reads aloud. Physical contact, such as hugging, is positive, as are efforts to encourage a child, whether by counting with a toddler or helping an infant struggling to walk. Also note negative behaviors, such as restrictions on activities or harsh or critical speech. Hitting, shouting, and other forms of abuse are obvious red flags. But so are punishing without explanation or ignoring a child.

Even if you find a center with all the right features, don't ignore nagging doubts. Selecting a center is a nonscientific process. In the end, pay attention to your gut feelings about whether your kid will thrive.

What to Look for in a Center

- ▶ A safe and clean environment with soft surfaces beneath climbing equipment, no sharp edges, and covered electrical outlets
- ▶ A willingness to put you in touch with parents of enrolled children before signing up
- ▶ A practice of sending home regular notes to inform parents of when a child ate and slept and how the day went
- ▶ Teachers with a background in early childhood education and a policy of providing ongoing staff training
- ▶ A flexible approach that allows young children to eat when hungry and sleep when tired, and older children to initiate activities
- ▶ A range of toys, books, materials, and activities

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Let Your Keyboard Do the House-Hunting

Would-be buyers can see homes near and far on the Web

BY ELLEN HOFFMAN

LaRae Maruyama, controller for the U.S. Olympic Committee, sifted through about 300 Colorado Springs (Colo.) real estate listings and looked at 60 houses over five months before she found one with the formal living and dining room and mountain view she wanted. But her search might have taken even longer were it not for the latest time-saving tool for buying and selling real estate—the Internet.

Especially helpful to Maruyama was a custom Web page, updated daily with new listings by Jennifer and Joe Boylan, agents for Prudential Professional Realtors. She came across the Boylans because their name was on a sign posted in front of a house that interested her. Their Web-based service alerted her to the home she ultimately bought. Using the Internet

"helped me eliminate properties that did not meet my specifications, and compare attributes of the houses, such as the type of building construction," she says.

Maruyama is in the forefront of a fast-growing trend. Save for closing your deal, you can now go through every stage of a home search without leaving your desk. Some 23% of buyers now use the Net as a search tool, up from only 2% in 1995, says the National Association of Realtors. By providing 24-hour access to information, listings, and financing options, the Net expedites what is often a time-consuming and frustrating process.

If you are a buyer thinking of following in Maruyama's path, you might first check Web sites with sections that can demystify the process. Microsoft's homeadvisor.msn.com provides tips on how you can determine whether you're paying

Real Estate



If you want to avoid paying an agent's commission, try a "sale by owner" Web site. You'll even get a sign for your yard

the right price. The Housing & Urban Development Dept.'s site (www.hud.gov/conright.html) covers such topics as the role of brokers, anti-discrimination laws, and explanations of the fees you will be charged.

Once you launch a search in earnest, you'll find most sites allow you to create a profile of the home you want, from its location and price to the number of bathrooms. But the resulting listings vary greatly in comprehensiveness. For instance, some listings aren't updated regularly. And some national sites, such as online auctioneer Homebid.com, lack listings for entire cities and states. That's why it helps to search for Web sites of local real-estate agents.

PANORAMA. I conducted a trial search and found that one of the best—or at least the most comprehensive—sources for listings is the NAR's Realtor.com. My goal was a home in the Minneapolis suburb of Golden Valley, with at least three bedrooms and two bathrooms, 2,000 to 3,000 square

feet, and a price range of \$100,000 to \$400,000. Realtor.com, whose database contains 1.3 million properties collected from Multiple Listing Services, an information-sharing system used by agents, yielded the largest list of homes for sale, with 36 properties that met my specifications. Homeadvisor.msn.com and Homebid.com showed nothing at all. Homes.com had no listings for Golden Valley, but it yielded six for the county it is in, Hennepin, which encompasses numerous suburbs. On Cyberhomes, I found 20 properties, but details on them were not as extensive as on Realtor.com.

If you are on the other side of the transaction, the Internet gives you the option of selling your home through an agent, who posts the listing, or

by yourself. To avoid paying an agent's commission, look into "sale by owner" sites. Owner whose sales, says Chief Executive Han have totaled \$30 billion since its launch 1996—currently lists 20,000 homes for sale. One for \$139 that allows you to post five on the Net and the other for \$89.95 that includes one photo. You will also get, by mail, some additional marketing tools, including a sign for your front yard and a book on how to sell your home. You can list on Owners.com for free if you only get one picture. This one-month listing, like the paid listings, also is distributed on Yahoo! and some other Net browsers. On Realtor PrivateForSale.com will list your home including up to six photos, for \$39.95 per month or \$99.95 for four months. To help you determine price for your property, HomeGain.com offers an instant valuation and a list of recent sales of comparable houses in your neighborhood.

Whether you are selling on your own or through a broker, check if your chosen site offers a virtual tour of your house. Developed by bamboo.com, the tour consists of a series of photos showing a view of a home's exterior and interior, such as bedrooms, living room, and kitchen. While the shots can be somewhat distorted, the tour allows potential buyers to see more of the house than any two-dimensional picture. Dana Weiler, partner and senior sales consultant at Pacific Union Residential Brokerage in Danville, Calif., credits the trendy virtual tour with closing a \$599,000 sale of a Walnut Creek house. A couple had liked the house, but they were out of the country. The family was in Southern California, and the absent members got on the Net to look. "They all said, 'You have to buy it,'" Weiler.

BANNER ADS. Almost every real-estate Web site can connect you with someone selling mortgage. In some cases, banner ads link you to a mortgage company. In others, a click will take you to a site, such as mortgage.com's or EBay's, that allows you to sort through current rates

types of loans for a mortgage, receive approval on the Net. These mortgages are cheaper than conventional varieties. Through both mortgage.com, which gives you a choice of lender, and EBay, which gives you a choice of loan more than 70 mortgage companies can submit your financial information through the Internet and talk with an associate on a number. To buyers are referred

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local offices of lawyers, title companies, and business affiliates.

Online mortgages can suffer from snags. Air Force Lieutenant Colonel Tim Printzenhoff of Colorado Springs got a 6.625%, three-year adjustable rate mortgage from E-Loan, a lower rate than from a local lender. But when he arrived at the title company for settlement, he found that his documentation—which he had sent to E-Loan 60 days earlier—had not arrived. He had to fax documents on his investments back to E-Loan before the settlement could occur, four hours late. He

also was charged a \$675 mortgage underwriting fee instead of the \$300 quoted. When he decided to back out, Printzenhoff received a \$250 rebate.

Despite such hassles, real estate cyberspace is providing tremendous savings and money to homebuyers and sellers. Sure, if you're a buyer, you'll eventually walk through the door of your dream home to see if that great room really is as spacious as the pictures you saw on your monitor. But the Net made it so much easier to locate that home in the first place.

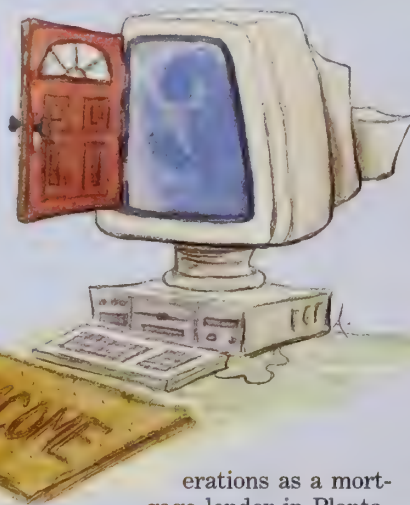
FOR SALE: A STAKE IN VIRTUAL REAL ESTATE

The growing connection between real estate and the Net has spawned a handful of related initial public offerings in recent months. Like so many dot.com stocks, real estate IPOs are losing money and remain highly speculative. But if you have faith that the economy will remain strong and interest rates will stay low enough to maintain a robust housing market, you might consider these stocks as long-term plays.

Current trends in the online real estate market bode well for these companies. For example, a recent report by Forrester Research estimates that \$91.2 billion worth of mortgage commitments will be made via the Web in 2003, up from \$18.7 billion in 1999.

POISED FOR GROWTH. E-Loan is poised to gain from that growth. The Dublin (Calif.) company is one of the leading online-mortgage brokers, offering clients a choice of loans from more than 70 lenders (table). In 1998, E-Loan closed 3,865 loans valued at \$835.1 million. It exceeded that figure in the first six months of 1999, closing 4,377 loans worth \$846 million. The company sees its growth coming from sectors besides mortgages. Already E-Loan arranges car and small-business loans on its site. Plans are under way to offer credit cards and provide mortgages through lenders in Australia and Europe.

Mortgage.com, which acquired its domain name in January, started op-



erations as a mortgage lender in Plantation, Fla., in 1994. The company originates mortgages, generating gains and losses when it sells them in the secondary market. Like E-Loan, its site allows customers to survey numerous current options and apply for a mortgage online. Mortgage.com reports that it closed 10,720 loans for a volume of \$2 billion in 1998 and 8,460 loans valued at nearly \$1.6 billion in the first two quarters of this year.

Homestore.com provides listings for the National Association of Realtors' huge Realtor.com site, as well

as other Web sites for buying, selling, and renting homes and commercial properties. In July, Cendant, franchiser of Century 21, Coldwell Banker, and ERA residential real estate brokerages, sued Homestore for more than \$300 million, alleging it had reneged on an agreement to give Cendant shares prior to the sale. Homestore has since suggested a settlement. Cendant, which is planning an IPO, is competing site called CompleteHome.com next year, might have its affiliated brokers sending Homestore their listings. Cendant said it has no plans to compete at this time.

SHOOT TO SELL. One of the most interesting Internet-related real estate offerings is bamboo.com. This Palo Alto (Calif.) company produces 3D degree house tours that real estate agents can buy for \$99.95 and upload on their Web sites. Unlike competitors such as IPIX, which sell software and cameras to enable agents to shoot their own virtual tours, bamboo.com uses its own videographers in 5,000 cities in North America.

Bamboo.com has made deals with RE/MAX, Prudential, and other national real estate franchise companies to promote the use of its technology. But those arrangements don't guarantee agents will purchase the virtual tours. Revenues have soared in the last year, from \$77,410 in 1998 to \$536,000 in the first six months of this year. It's just one sign of how the process of buying and selling homes is shifting to the Net.

Ellen Ho

Real Estate Net Plays

COMPANY (SYMBOL)	INITIAL PUBLIC OFFERING	IPO PRICE	CURRENT PRICE*
BAMBOO.COM (BAMB)	AUG. 26	7	17 1/4
E-LOAN (EELN)	JUNE 29	14	24 1/4
HOMESTORE.COM (HOMS)	AUG. 5	20	44 1/4
MORTGAGE.COM (MDCM)	AUG. 11	8	12

* Oct. 4

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Against the Tide

Contrarian bets are winners for Brandes

You won't find high-priced Net issues in the \$60 billion worth of funds managed by Charles Brandes and Glenn Carlson, the two top stockpickers at San Diego's Brandes Investment Partners. Die-hard value investors, they prefer beaten-down companies with sound balance sheets that sell for book value or less and fetch single-digit price-earnings ratios. Once they buy, says Brandes, they may have to wait "for a hell of a long time" before their bets pay off. The wait can be worth it, however.

One of the two essentially identical retail mutual funds Brandes manages, the \$382 million Northstar International Value (table), returned 44.39% over the 12 months ended Sept. 30. With a lower expense ratio, the other fund, the \$20 million Nations International Value, had slightly better returns. But its load is higher.

Brandes and Carlson attribute their solid recent performance to a prescient decision to invest in Europe in 1992. As anticipation of a successful launch of the euro increased last year, they unloaded many of their holdings at huge gains and plunged into Asia—just in time for Japan's market to take off. The partners also manage domestic portfolios for institutional clients and say that they are finding value in the U.S. now that stocks are off their record highs. They spoke with Senior Editor William Glasgall.



BRANDES: Prescience paid off in Europe



CARLSON: Looking for growth stocks gone bad

Q: The Nikkei stock average is up 37% in terms this year. Are you selling?

CARLSON: We're starting to take some profits.

Q: What do you still like in Japan?

BRANDES: Hitachi. With hundreds of buses they had no idea what they were doing. They sold 60% of book.

CARLSON: But Hitachi has taken some interesting steps. They're breaking into five business units, setting new targets for return on equity and [Despite the Nikkei's recovery], they're still looking for a slight premium to book. They're still

Q: Are you still in Europe?

CARLSON: We continue to own a big chunk of phone stocks, including Deutsche Telekom. We developed parts of Europe, phone use is a third to 80% of that in the U.S.

Q: Where do you see value at home?

CARLSON: We look for growth stocks going up. One is Service Corp. International [the home group]. It was selling for 30 times earnings, but much of its gains were due to acquisitions. Now, expected growth rates have dropped from 15% to 18% a year, to 5% to 8%. It's selling at 10 times forward earnings but has a decent balance sheet. [We also own] McKesson, the largest drug distributor in the world. The value of the merged companies has dropped \$17 billion since their merger.

Q: Anything else?

CARLSON: Toys 'R' Us. Its market cap is half of eToys, and it's trading at book and nine times earnings. After being the darling of the market, they bungled it. But is it right to completely write them off?

BRANDES: We don't have a feel for the upside. History tells us that, on average, [in situations like this] there is a whole lot of upside. □

Big Gains Abroad

Northstar International Value Fund (NIVAX)

	YTD	1-YR
TOTAL RETURN*	21.50%	44.39%

ASSETS \$382 million

AVG. P-E/PRICE-BOOK 22.2/2.5

LARGEST HOLDINGS Deutsche Telekom, HSBC, Kyocera

PHONE 800 595-7827

*Aug. 31

DATA: BRANDES INVESTMENT PARTNERS, STANDARD & POOR'S CORP.

Q: Why did you sell in Europe?

CARLSON: We'd been building positions in big, reasonably valued European companies the world believed couldn't survive, like Alcatel, Daimler, Nestlé. In 1998, values in these wonderful companies reached huge levels. So we got out.

Q: You sold Daimler-Benz at 22 times projected earnings. Now it's DaimlerChrysler and the stock's p-e is down to 10. Are you going back in?

BRANDES: We're getting closer. No doubt about it.

THE COLOR PRINTER COMPARISON HP DOESN'T WANT YOU TO SEE.

FEATURES		
	TEKTRONIX PHASER® 740	HP® 4500
MAXIMUM RESOLUTION	1200 dpi	600 dpi
FASTEST FULL-COLOR PRINT SPEED	5 ppm	4 ppm
POSTSCRIPT SUPPORT	Adobe PostScript® 3	PostScript 2 Clone
BUILT-IN NETWORKING	Yes	No
BUILT-IN REMOTE MONITORING	Yes	No
FREE, UNLIMITED PHONE SUPPORT	Yes	No
PRICE*	\$1995 740/M	\$2499 4500

Surprised by the comparison? We're not. We've been busy perfecting color printing for more than 15 years, and developing breakthrough products such as the Tektronix Phaser® 740 color laser printer. It's the first workgroup printer to deliver amazing photo-quality color at an equally amazing price. Imagine, true 1200 dpi color output on everything from labels to letterhead. Dazzling color presentations and overheads. And a host of user-friendly features that make the Phaser 740 color laser as easy to use as it is to own. To learn more about the Phaser 740 color laser, or bringing color into your office, call 1-877-362-6567, ext. 1629 or visit www.tektronix.com/compare.



Minifunds, Maxi Gains

Soon, you'll be able to track tiny outperformers

BY TODD SHAPERA

When it comes to mutual-fund performance, Jonas Ferris thinks size matters—small size. Ferris, a former securities analyst and fund marketer, observes that many funds with assets under \$25 million beat multibillion-dollar competitors. That's because they tend to be nimbler. Unlike Magellan-size rivals, they can easily take positions in promising small companies without driving their stocks through the roof. If successful, the investments can give the funds' small portfolios a huge boost. A recent study by Boston-based Financial Research Corp. of 766 funds with 10-year track records found that small, generally young funds on average delivered returns of 80 basis points a year over their category averages.

But the problem with minifunds is that it's hard to find information about them—even high-fliers. Nasdaq doesn't list funds on its ticker until they gain \$25 million in assets or 1,000 investors. Since Nasdaq supplies the fund data used by

newspapers and many investment websites, you wouldn't have found such minifunds as Firsthand Technology Innovators, whose assets were only \$14 million in June. Now with \$142 million in assets, its performance is up more than 101% in the year ended Sep 30. You can find monthly updates on many unlisted funds at Business Week Online (visit www.businessweek.com/investor or America Online, keyword: BW). But even there, you won't find daily updates. "It's a Catch-22 for puny funds," says Morningstar Inc. Chief Executive Phillip Phillips. "They can't get coverage because they don't have assets, and they can't get assets because they don't get the coverage."

To offer better visibility for these funds, Ferris, 28, and software entrepreneur Janet Price, 44, plan to launch MAXfunds.com in mid-November. The site (www.maxfunds.com) expects to provide daily pricing, portfolio summaries, analysis, and manager interviews for 200 funds with less than \$25 million in assets. It also will provide pricing on all no-load equity funds, no matter the size. MAXfunds.com will list such funds as \$525,000, golf-focused Value Trend Links; the old StockCar Stocks Index Fund, (\$4.7 million in assets); and the more seasoned, female-friendly Pro-Conscience Women's Equity (\$11 million). **HIDDEN GEMS.** Ferris was inspired to create the site after struggling last year to help build the Third Millennium Russia Fund, which has been plagued by volatile results. Ferris figures that many of the 800 other equity funds each year also suffer for lack of attention. "A lot of funds are small for a reason," Phillips says. "But it doesn't mean there aren't diamonds in the rough." Indeed, Morningstar's vaunted five-star roster includes the microscopic Warburg Pincus Japan (with assets of \$1 million), its sibling, Japan Small Company (\$3 million), and large-company growth Noah Fund (\$8 million).

If you're considering investing in a minifund, keep a close eye on asset size, as many minifunds can disappear when they grow up. For instance, Perkins Opportunity ranked first among Morningstar's small-cap growth funds in 1995, returning 70%

Then, the fund grew from \$5.1 million to \$68 million in assets in one year. By 1996, assets were \$103.2 million. The fund sank to 10th in its class, returning -7.3% vs. 19.4% for its peers. The slide continued, with the fund now ranked 100 among 220 small-cap funds. In the past three calendar years, Perkins' assets have shrunk so far that the fund is practically mini again, with \$29 million in assets. And again outperforming its small-cap peers and the Standard & Poor's 500-stock index. Is small beautiful? MAXfunds.com will give you a chance to find out.

Thank Heaven for Little Funds

FUND/SYMBOL	ASSETS MILLIONS	INCEPTION	12-MO. TOTAL RETURN*	PHONE
BERKSHIRE FOCUS (BFOCX)	\$13.0	7/1/97	119.27%	877 526-0707
FIRSTHAND TECH. INNOVATORS (TIFQX)	142.0	5/1/98	298.35	888 884-2675
THURLOW GROWTH (THRGX)	3.4	8/8/97	153.62	888 848-7569
TURNER MICROCAP GROWTH (TMCGX)	12.9	2/27/98	113.68	800 224-6312
WARBURG PINCUS INTL. SMALL CO.**	16.7	5/29/98	153.86	800 927-2874

*12 Months through Sept 30

**No Nasdaq ticker symbol

DATA: MAXFUNDS.COM



When you call up and say you're a small business, do some businesses make you feel, well, um, small?

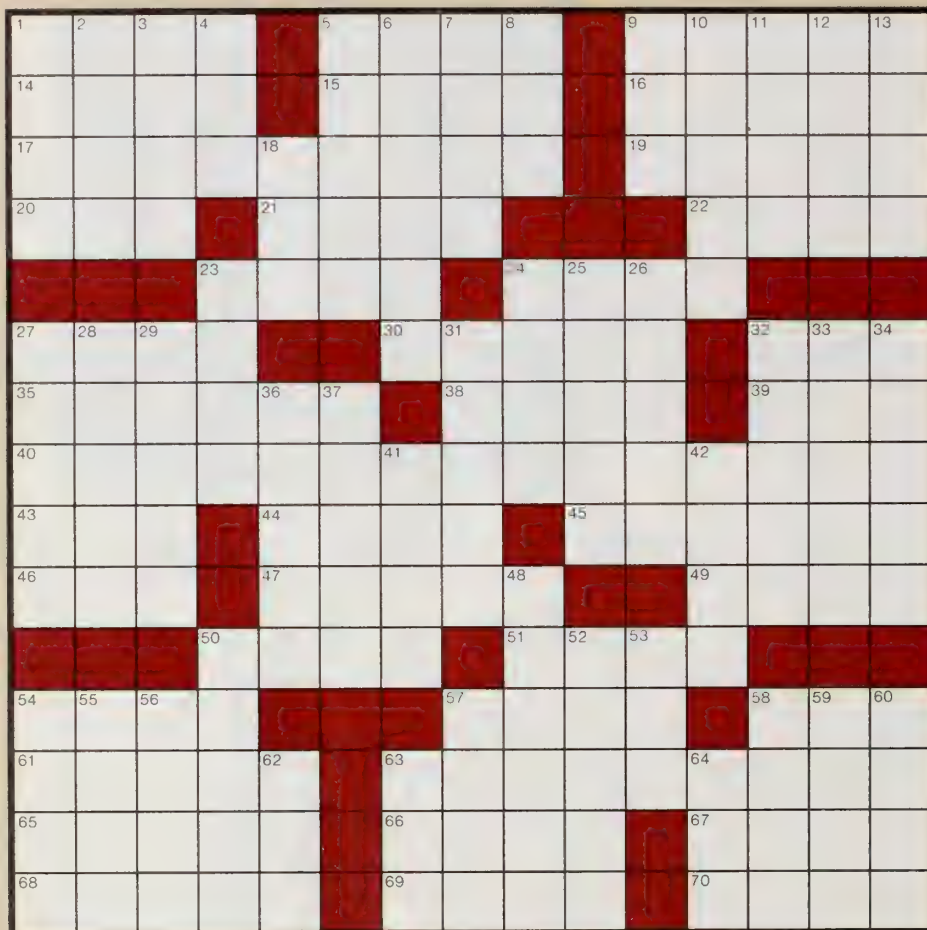
After helping a diverse range of companies set up business on the Internet, we understand what most businesses want: to be taken seriously. Whether you employ 200 people, MindSpring Biz will help you identify your needs for taking your business online. We'll stake out your piece of real estate on the Web, and even help you get your site designed if you'd like. And our high-speed business access service allows you to experience the Internet the way you should: immediately. If you're thinking about selling stuff online, we can talk you through several commerce solutions, from shopping cart software to credit card authorization. Our customer service staff is available 24 hours a day to help answer any questions you might have, including: "What's shopping cart software?" Call us at 1-888-MSPRING or visit us at www.mindspringbiz.com and get your first month of Web site hosting for free. Hurry, offer expires 10/31/99.



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INTERNET BUSINESS

Mixing Business with Pleasure by Lincoln

Puzzle #19



ACROSS

1. "My, my, what have we ___" (see page at right)
5. Taiwan-based PC maker
9. Goodyear's headquarters
14. Corrosive chemical
15. Mock fanfare
16. T. ___ Pickens
17. Campaign-finance reform target
19. Works on manuscripts
20. One of Turner's networks
21. Legal eagle Dershowitz
22. Considerably
23. Stock-newsletter rating
24. Cologne ingredient

27. Travel professionals' group: Abbr.
30. "In the ___" (Nixon book)
32. Vast expanse
35. Presides over
38. Paris airport
39. Owns
40. Chips
43. Lodge brother
44. Mr. Panetta
45. Unseat, as a CEO
46. Wily
47. Computer key
49. Administrative staffer: Abbr.
50. Phone-system units: Abbr.
51. Line-___ veto

54. Pioneer American educator
57. Admired one
58. Faux ___
61. Nautical direction
63. Big Baby Bell
65. First American monopolist
66. Cordial
67. European capital
68. Legend in labor history
69. "The world puts its stock" in it: Abbr.
70. Mope

DOWN

1. Possess, old-style
2. London School specialty: Abbr.

3. Break in friendly relations
4. Wall Street summer clock setting: Abbr.
5. Bikini, for one
6. Sam Bronfman's homeland
7. '50s British prime minister
8. Bit of sunshine
9. Justice Fortas
10. Brand name coined by George Eastman
11. Vex
12. Not fooled by
13. Hotbed
18. Cultural Revolution leader
23. Clairol concern
24. Chicago exchange, for short
25. Not occupied, as an apartment
26. Final authority
27. High points
28. Congame decoy
29. Not at all tasteful
31. Network exec Arledge
32. Mall tenants
33. House of Lords members
34. Goodwill, for example
36. Movado rival
37. Paid out
41. Deteriorates
42. Unsolicited e-mail
48. Railroad patrons
50. Natural-gas giant
52. Jazz singer Mel
53. Lilly of pharmaceuticals
54. Polite term of address
55. Church section
56. Part of N.B.
57. "If ___ interrupt..."
58. Money in Monterrey
59. Rights organization: Abbr.
60. Unrepairable
62. Determine judicially
63. Grain bristle
64. Ladder-of-success destination

For answers to this puzzle:

Turn to page 233 in this week's issue of Business Week or visit Mixing Business with Pleasure by Lincoln on www.businessweek.com (URL: www.businessweek.com/adsection/puzzlesbylincoln/index.htm)

Puzzle created by: Stanley Newman.



www.lincolnvehicles.com

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my, my, what have we here?

 **LINCOLN LS**
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WILL THESE ACORNS TURN INTO OAKS?



BY ROBERT BARKER

Just three years old, the Acorn USA Fund is up 69%—more than twice the return of its small-cap benchmark, the Russell 2000

A 13-year-old boy named Rob Mohn spotted a book, *The Bulls and the Bears*, in his suburban Chicago school library. His first thoughts: basketball! football! Then he looked closer. The next thing he knew, he got his dad to help him buy Ethyl Corp. convertible preferreds. Right away, they plunged—this was amid the rout of 1974—but he held on for a profit. “I became a total stock geek,” he says. Other kids “just looked at me as a freak.”

As Mohn recalled all this recently in his 30th-floor Chicago office, I couldn’t help thinking that at age 38, he’s still boyish, and he’s still a stock geek. Then I wondered: What’s he buying now?

His \$310 million Acorn USA Fund has just turned three years old with freaky—I mean, uncommon—results (table). It’s up 69%, more than twice the return of its small-cap benchmark, the Russell 2000. Better yet, Standard & Poor’s figures that the fund soared even after adjusting for risk. How? Just the way Mohn’s mentor, Ralph Wanger, manager of the venerable Acorn Fund, taught him: By patiently picking and holding stocks in strong little companies that figure to grow into big companies.

Acorn Fund, which unlike Mohn’s includes foreign stocks, is famous for four-digit gains in the likes of Harley-Davidson and Carnival. Less famously, Mohn’s fund has been scoring with such stocks as fiber-optic networker RCN, in which Microsoft co-founder Paul Allen also holds a big stake. Wanger, Mohn, and the managers of Acorn’s three other funds swap stock ideas freely. Where do they see future gains? Here are four stocks they’ve been buying lately, and why:

■ **PROJECT SOFTWARE & DEVELOPMENT.** Like the rest of us, Mohn is agog at the market values Internet companies

are getting. He wants some of that, too, but he wants it the Acorn way—at better odds. That’s why he has been buying this maker of custom software systems. He calls it “my chicken-hearted Internet play.” Factories use the company’s

new business-to-business Web site, MRO.com, order replacement parts and supplies. Mohn bought the stock around 40, figuring he had an established software business at a fair price plus a cheap call on MRO.com. What’s Mohn worth? Hard to say, but rival Ariba went public in June with a \$1 billion-plus market cap, more than twice the value investors now put on all Project Software.

■ **AMERICREDIT.** This company is a leader in financing sales of used cars to people with no credit. Sounds like a rotten business. Fact is, the same line that sent highflier Mercury into bankruptcy last year. The difference, says Mohn, is the software tools that Americredit developed to figure out which borrowers are better risks, a job traditional lenders like Mercury left largely to a loan officer’s intuition. He sees profits growing at 30%, yet at a price that goes for 10 times next year’s estimated

earnings. He thinks the stock is worth about 25.

■ **FIRST HEALTH.** First Health Outsourcing is a therapeutic services company, earning through stocks in Acorn funds, and First Health

PATIENT: Mohn holds shares in the stocks for the long haul.



Health is a prime example. It has built a nationwide network of prepaid provider organizations that collect a fee for managing the care of members with such big names as McDonald’s. “I do the dirty back-end work,” Mohn says, but none of the underwriting risk shouldered by the insurers. Now at a price that goes for 30 times next year’s estimated earnings, the stock in Acorn’s fund is worth 30.

■ **NATIONAL DATA.** Mohn’s big position in National Data, a processor of credit- and debit-card charges, got whacked recently when quarterly earnings missed the Street’s estimate by a penny. At 25, the stock boasts a price-to-earnings ratio of about 10—to 1, a “dumb” number. The market is confused, thinks, because National Data operates in two distinct markets—financial services and health care. “The stock falls in the Wall Street where we pick it up,” he says. Its goal, to make physician claims much as it does the prescriptions, lends it growth potential the market is ignoring. He values it around 60.

Will all four of these stocks prove instant winners? Unlikely. But as even less precocious geeks I know have learned, winning is a matter of picking carefully and staying patient.

For barker.online, go to www.businessweek.com/investor/ or AOL, Keyword: BW Daily

Turning in Dandy Returns

	TOTAL RETURN	
	THREE-YEAR*	YEAR TO DATE**
ACORN USA	18.6%	3.4%
RUSSELL 2000	9.8	2.4

* Annualized since fund’s inception, Sept. 4, 1996, to Sept. 30, 1999 ** Through Sept. 30

DATA: ACORN FUNDS,
FRANK RUSSELL CO.



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KULICKE A 'SLEEPER'?



NEIL G. MARCIAL

e & Soffa's
onductor
may surge.
no rival may
ing Boyd
g. And ITT
ries looks
shift into
ear

Semiconductor stocks are staging an impressive rally, but some of them are still out of sync. One stock that continues to trail the group is Kulicke & Soffa Industries (KLIC), the world's largest maker of semiconductor assembly equipment. The shares have been acting like a yo-yo: They fell from 25 in April to 19 in May, rebounded to 28½ in July, then tumbled to 19 in August, closing at 26 on Oct. 6. But that doesn't bother investment manager Scott Black, a rabid value player who scouts for companies that are doing poorly but whose businesses are on the verge of a turnaround. He thinks Kulicke & Soffa is one such sleeper.

"It is in an industry that's moving fast, and with Kulicke's leading-edge technology, the company will at least catch up with its peers," says Black, president of Delphi Management in Boston. "The stock should double from here in 12 months, based on the earnings recovery we are projecting." The recovery is due, in part, to the bounce in the Asian economies and the rebound in PC sales in the U.S. Kulicke's assembly products include wire-and-die bonders, which are used to bond tiny circuit wires to semiconductor chips, and which account for some 60% of equipment sales. Among Kulicke's major customers: Intel, Micron Technology, Lucent Technologies, and Motorola.

Black figures that Kulicke has a 70% share of the market in the U.S. market and 33% worldwide. Stronger demand for more advanced systems has raised spending on assembly equipment, pushing up orders for Kulicke bonders, says Black. Analysts expect Kulicke to post a loss this fiscal year (ended Sept. 30.). Black figures Kulicke will be back in the black in 2000, with earnings of \$1.25 a share on revenues of \$600 million, and \$2 on \$690 million in 2001.

WHY BOYD GAMING MAY BE A GOOD BET

Investment pro Steve Kroll is not a gambling man, but he is keen on casino stocks these days. He's betting that Big Board-listed Boyd Gaming (BYD), currently at 6 a share, will soon catch fire like many other gambling stocks have. "It is a play on the millennium traffic [at New Year's] and a takeover bet as well," he says.

"Boyd is the cheapest and the best valuation story in the casino group," argues Kroll, a money manager at

New York investment firm Monness Crespi & Hardt. Other casino stocks that Kroll had picked earlier this year have run up, including Park Place Entertainment, which leaped from 7 in April to 13, and Station Casinos, which has zoomed from 13 to 25.

Kroll believes that Boyd, which owns 12 casinos located in Illinois, Louisiana, Mississippi, and Nevada, is worth at least 20, based on its earnings growth and the lofty price-earnings ratios of its peers. Boyd currently sells at six times Kroll's estimated 2000 earnings of \$1 a share, up from an estimated 65¢ this year.

Kroll notes that Boyd will open a resort in Atlantic City through a "sweetheart deal" that it has struck with Mirage Resorts, arranged by the latter's chairman and CEO, Steve Wynn. In Atlantic City, Boyd and Mirage are co-developing a resort called the Borgata, a \$750 million entertainment facility with 1,200 guest rooms. It will adjoin Mirage's own planned resort complex. The Borgata is scheduled to open in 2002.

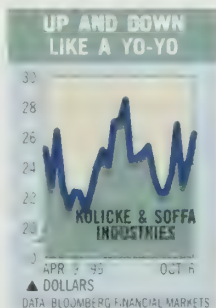
With the consolidation going on in gambling, Kroll thinks Boyd could become an attractive takeover. Right now, it looks as if "Mirage and Boyd are on very friendly terms," says Kroll.

ITT INDUSTRIES: ITS TIME MAY BE HIGH

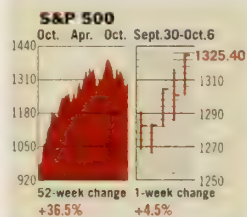
The stock market has been hard on industrial companies, despite the economy's strength. Take ITT Industries (IIN), whose stock is down from 41½ in mid-April to 32, at a depressed p-e ratio of just 12.6 on estimated 1999 earnings. But some analysts are certain that the time for such industrial stocks is near, if not already here.

Over the past two years, ITT Industries has changed its business mix, and "emphasis has shifted toward profit enhancement and acquisition growth," says Quinten Nufer, an analyst at Warburg Dillon Read. He believes that "the stock's underperformance is a buying opportunity" and also that strong earnings gains and improving fundamentals could well drive an expansion of the p-e.

ITT Industries was formed after the 1995 breakup of ITT Corp., which then included gaming, hotel, insurance, and education management operations. Now, ITT Industries has "a portfolio of faster-growing, less cyclical, and more profitable businesses," says Nufer. ITT is a major producer of pumps, electronic connectors, and military defense gear. Harriet Baldwin of Deutsche Bank Alex. Brown rates the stock a buy, based on its market leadership and opportunities to improve returns. Her 12-month target for the stock price is 46, or 16 times her 2000 earnings-per-share estimate of \$2.90.



STOCKS



COMMENTARY

The market may finally be returning to health. U.S. stocks slumped on Oct. 1, after a manufacturing report suggested the economy may be growing too fast and encourage inflation. But interest-rate optimism gave stocks and bonds new vigor. On Oct. 6, the Dow Jones industrial average rose 188 points in anticipation that third-quarter profit growth will be healthy.

Data: Bloomberg Financial Markets

U.S. MARKETS

	Oct. 6	% change Week	% change Year
Dow Jones Industrials	10,588.3	3.7	36.7
Nasdaq Composite	2857.1	4.6	89.1
Nasdaq 100	2531.9	5.6	113.7
S&P MidCap 400	389.9	2.0	34.8
S&P SmallCap 600	177.2	1.9	28.4
S&P SuperComposite 1500	278.0	4.2	34.5

SECTORS

	Oct. 6	% change Week	% change Year
S&P/BARRA Growth	775.3	5.6	43.8
S&P/BARRA Value	574.2	3.2	24.6
S&P Basic Materials	125.5	2.5	16.2
S&P Capital Goods	1023.7	3.9	46.2
S&P Energy	812.9	-0.8	9.1
S&P Financials	128.8	6.4	28.5
S&P REIT	76.7	1.1	-8.0
S&P Transportation	609.6	3.3	6.5
S&P Utilities	244.6	2.2	-7.7
GSTI Internet	485.2	5.5	235.2
Morgan Stanley Cyclical	544.8	2.1	36.8
PSE Technology	656.6	4.3	127.3

BEST-PERFORMING GROUPS

	Last month %	Last 12 months %
Gold Mining	30.3	Communications Equip. 170.1
Shoes	14.9	Instrumentation 141.6
Defense Electronics	14.6	Semiconductors 141.3
Specialty Retailers	12.0	Invest. Banking/Bkrg. 109.6
Instrumentation	8.2	Computer Systems 96.0

GLOBAL MARKETS

	Oct. 6	% change Week
S&P Euro Plus	1342.5	2.0
London (FT-SE 100)	6097.5	1.3
Frankfurt (DAX)	5353.3	4.2
Tokyo (NIKKEI 225)	17,896.4	3.6
Hong Kong (Hang Seng)	13,018.0	1.3
Toronto (TSE 300)	7025.1	2.1
Mexico City (IPC)	5116.3	0.7

FUNDAMENTALS

	Oct. 5	Week ago
S&P 500 Dividend Yield	1.30 %	1.31 %
S&P 500 P/E Ratio (Trailing 12 mos.)	30.9	30.1
S&P 500 P/E Ratio (Next 12 mos.)*	22.4	22.5
First Call Earnings Surprise*	5.01 %	3.95 %

*First Call Corp.

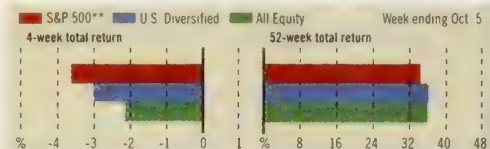
TECHNICAL INDICATORS

	Oct. 5	Week ago
S&P 500 200-day average	1307.1	1303.9
Stocks above 200-day average	31.0 %	30.0 %
Options: Put/call ratio	0.58	0.62
Insiders: Vickers Sell/buy ratio	1.24	1.25

WORST-PERFORMING GROUPS

	Last month %
HMOs	-32.6
Toys	-29.7
Furnishings & Appliances	-26.6
Cosmetics	-19.5
Oil & Gas Drilling	-16.2
Pollution Control	
Toys	
Food Wholesalers	
Tobacco	
Manufactured Housing	

MUTUAL FUNDS



Data: Morningstar, Inc.

**Vanguard 500 Index fund

EQUITY FUND CATEGORIES

Leaders	Four-week total return	%	Laggards	Four-week total return	%
Precious Metals	27.3		Health	-7.9	
Japan	4.1		Natural Resources	-6.6	
Communications	2.4		Mid-cap Value	-5.6	
Technology	2.2		Large-cap Value	-4.9	
Diversified Pacific/Asia	1.0		Small-cap Value	-4.2	
Leaders	52-week total return	%	Laggards	52-week total return	%
Technology	145.3		Real Estate	2.0	
Japan	120.3		Precious Metals	11.3	
Diversified Pacific/Asia	85.8		Domestic Hybrid	14.2	
Communications	81.8		Utilities	15.2	
Pacific/Asia ex-Japan	73.8		Small-cap Value	15.6	

INTEREST RATES

KEY RATES	Oct. 6	Week ago	Year ago
MONEY MARKET FUNDS	4.92%	4.90%	5.02%
90-DAY TREASURY BILLS	4.80	4.83	4.15
1-YEAR TREASURY BILLS	5.32	5.27	4.23
10-YEAR TREASURY NOTES	6.03	5.97	4.34
30-YEAR TREASURY BONDS	6.17	6.13	4.83
30-YEAR FIXED MORTGAGE†	7.90	7.80	6.54

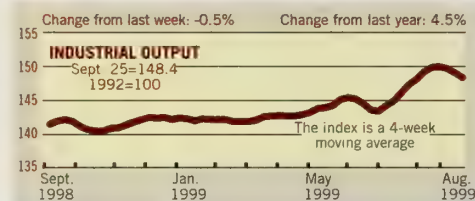
BLOOMBERG MUNI YIELD EQUIV

Taxable equivalent yields on AAA-rated, tax municipal bonds, assuming a 31% federal 10-yr. bond 3

GENERAL OBLIGATIONS	4.99%
TAXABLE EQUIVALENT	7.23
INSURED REVENUE BONDS	5.17
TAXABLE EQUIVALENT	7.49

†BancQuote, Inc.

BW PRODUCTION INDEX



Information on each of the index components is at www.businessweek.com.
BW production index Copyright 1999 by The McGraw-Hill Companies

The production index continued to decline in the week ended Sept. 2. The averaged index also fell, to 147.2. Electric output was down 1.1% from a seasonal adjustment, as cooler temperatures prevailed. Auto and truck production as crude-oil refining also fell. Included in the output of steel, coal, and rail-freight traffic was also up, modal freight this week higher than other previous week in history.

THE WEEK AHEAD

RETAIL SALES Thursday, Oct. 14, 8:30 a.m. EDT ▶ Retail sales probably increased at an annual rate of 0.3% in September, says the median forecast of economists surveyed by Standard & Poor's MMS, a division of The McGraw-Hill Companies. Excluding car purchases, store receipts likely rose 0.4%. Shoppers were busy in August, when total retail sales jumped 1.2% and nonauto purchases increased 0.7%.

EXPORT-IMPORT PRICES Thursday, Oct. 14, 8:30 a.m. EDT ▶ Prices of exported goods likely edged up 0.2% in September, after a 0.4% gain in August. Import prices were probably up by a large 0.7%, on top of a

1% jump in the preceding month. The recent import-price acceleration, however, is concentrated in higher oil prices.

PRODUCER PRICE INDEX Friday, Oct. 15, 8:30 a.m. EDT ▶ Producer prices of finished goods probably rose 0.4%, says the S&P MMS median forecast. That follows a 0.5% increase in August. Excluding food and energy, core prices likely rose a smaller 0.2% for the month, after falling 0.1% in August.

BUSINESS INVENTORIES Friday, Oct. 15, 8:30 a.m. EDT ▶ Inventories held by manufacturers, wholesalers, and retailers likely edged up 0.3% in August, the same as the

July gain. Inventories have been very tight this year, in part because businesses anticipate the strength in demand.

INDUSTRIAL PRODUCTION Friday, Oct. 15, 9:15 a.m. EDT ▶ The MMS median forecast expects that output at factories, mines, and utilities probably rose 0.3% in September. Output rose 0.3% in August. The average operating rate likely stayed around 80%.

BusinessWeek ONLINE

For more investment data and the components of the production index, visit www.businessweek.com.

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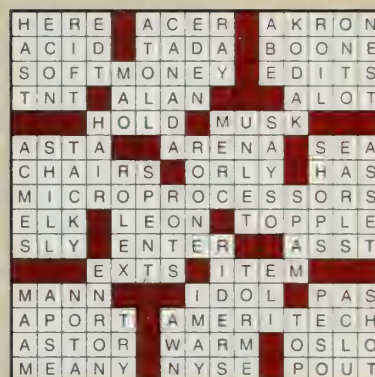
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POVERTY IN AMERICA: SOME GOOD NEWS

The current expansion has just entered its 35th quarter—on its way to becoming the longest in U.S. history. Of all the economy's achievements, perhaps none is more important than the improvement being made in the lives of the very poor. The Census Bureau's latest report contains much good news: the poverty rate is the lowest in 10 years, annual income for the poorest fifth of black households has jumped by 20% since 1992, and income inequality has finally stopped worsening. After three decades of decline, real wages are at last rising in response to America's tight job market (page 156).

The Fed, which did not raise rates at its latest meeting, has shown courage in fostering the fastest sustainable economic growth possible, despite criticism from conventional inflation hawks. This has driven the unemployment rate to around 4%, producing a job market with enough demand to raise the wages of workers at the very bottom of the economy.

All this is great for America's cities. The tight labor market is encouraging companies such as United Airlines, H&R Block, and Sprint to look for workers in places they never dreamed of—and to pay them higher wages. Companies are investing in training new employees and upgrading their skills. Desperate for laborers, they are moving to inner cities, injecting new wage money that attracts retail chains, such as Costco and Pathmark Stores. Across the nation, inner cities are being reborn.

Government policy is playing a major, if mixed, role. Rais-

ing the minimum wage is probably helping to boost income at the very bottom of the wage scale. Yet the number of immigrants permitted into the U.S. in recent years probably puts downward pressure on wages at the lower end. The Earned Income Tax Credit for the poor is clearly helping by putting up to \$26 billion in pockets each year.

But the gains remain insufficient. The poverty rate in America is still 12.7%, or 34.5 million people, considerably above the 11.1% rate of 1973 and significantly more than the 23 million poor people in 1973. The ex-poor must improve their skills, crossing the digital divide into the higher-paying New Economy, if possible. But if there is a serious recession any time soon, they could easily drop back into poverty. This time there won't be much of a welfare safety net to catch them.

The best hope for reducing poverty lies in continuing the fastest pace of sustainable growth possible. How fast is an open question. The economy has sustained 4% growth for several years without inflation. The Fed appears to believe a 3% annual rate is doable over the long run. In any case, enough. At that rate, job markets can remain sufficiently tight to keep real wages rising in a moderate fashion. In turn, requires a very delicate balancing act by the Fed. It must remain vigilant to signs of an inflationary surge, but also must not prematurely squeeze the life out of a surprisingly robust expansion that is finally beginning to improve the lot of America's poor.

WHY THIS MERGER WAVE IS DIFFERENT

Worldwide mergers and acquisitions hit a record \$2.2 trillion dollars in the first nine months of 1999, up nearly 20% from a year ago. The \$129 billion union of MCI WorldCom Inc. and Sprint Corp. is only the largest of hundreds of megadeals sweeping the U.S., and Europe. What's going on? And what should trustbusters do about it?

The current merger wave is very different, in kind as well as size, from those in the past. Not one, not two, but up to half a dozen forces are driving mergers. Companies are merging not only to cut costs and shrink capacity but also to gain access to new technologies, new markets, new skills, even new workers. Offline companies are buying online companies to get access to the Internet. Online companies are merging to expand the palette of services they offer customers. So desperate for Net-savvy workers are some companies that they are even merging just to get bodies.

Mergers in telecommunications epitomize several trends. Long-distance telephone operator AT&T, for example, bought into wireless, then into cable. MCI WorldCom is doing the same, as is Deutsche Telekom, which bought into the Hrvatska Corp.,

and France Télécom, which linked up with Vodafone.

The decline of pricing power is another major force driving mergers these days. Globalization and electronic commerce have increased competition, preventing companies from raising prices. Profit margins are being squeezed. Mergers are one way to cut costs by shedding labor.

Finally, companies are merging to trim capacity, increase competition, and hike prices. Energy prices are up because an OPEC cartel can enforce production cutbacks, at least in the short run. But the mergers of energy companies have led to a drop in refining capacity, helping to push oil prices up. There have been mergers in copper, nickel, and aluminum that have decreased capacity, production, and competition. And prices of industrial metals have been moving up.

The bottom line: Unlike in the past, there are lots of reasons for mergers. Consolidation, especially in Old Economy industries such as metals, can lead to less competition and higher prices. But the situation in the fast-moving, highly innovating New Economy is much more complex and requires a defter hand. Trustbusters, please take note.

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BEFORE YOU CRACK?

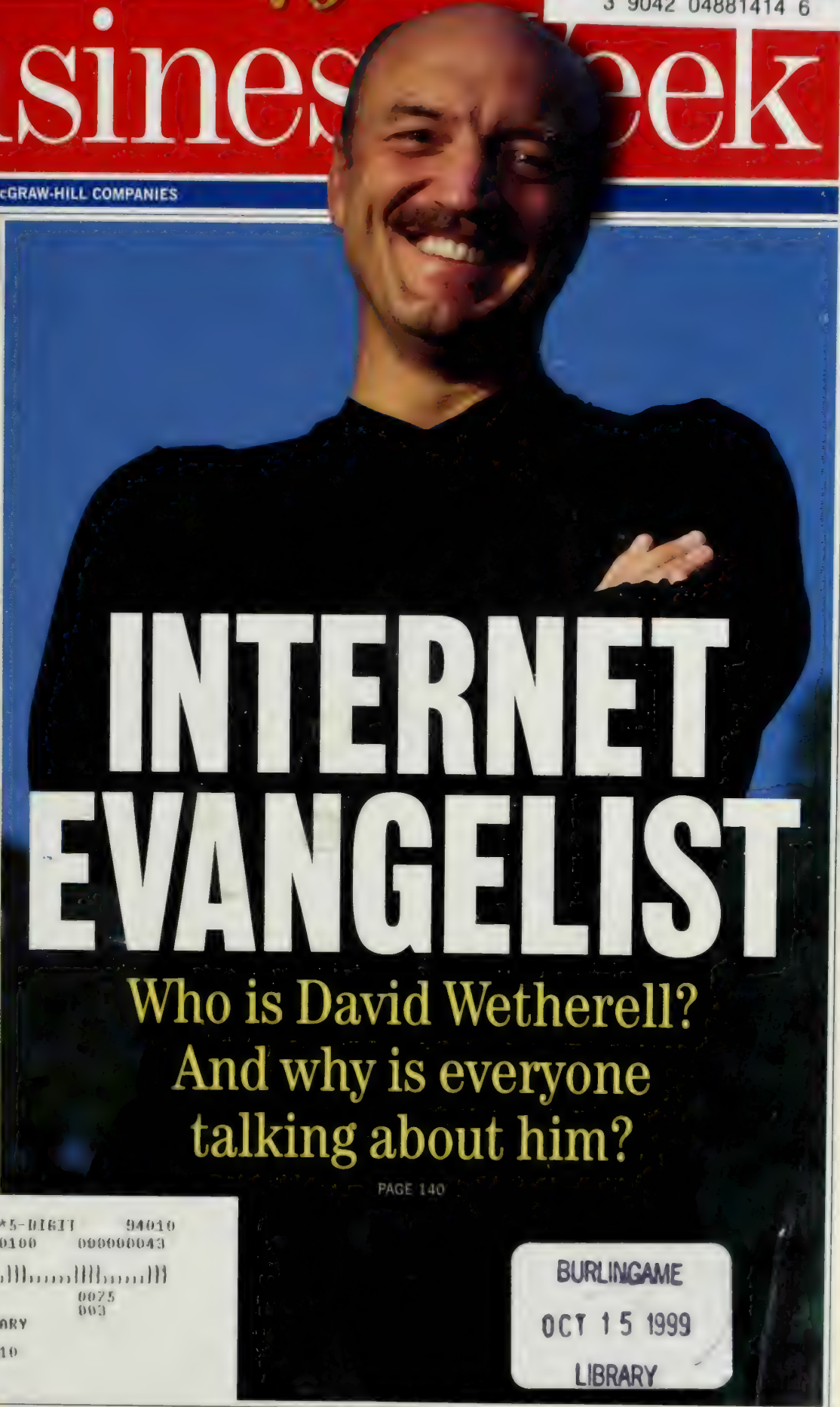
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INTERNET EVANGELIST

Who is David Wetherell?
And why is everyone
talking about him?

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A photograph of two children swimming underwater in a pool. The child in the foreground is wearing a red tank top and green goggles, with their arms outstretched. The child in the background is wearing a black tank top with colorful patterns, pink swim trunks, and red swim caps and goggles, also with arms outstretched. The water is clear blue.

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COVER STORY

INTERNET EVANGELIST

Nobody believes in the Net like David Wetherell—and few have profited as much from it. How long can his home run streak last? page 140



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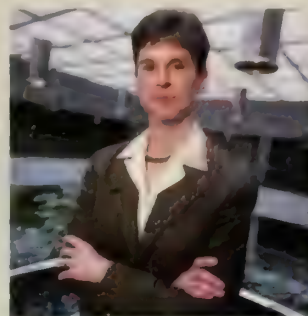
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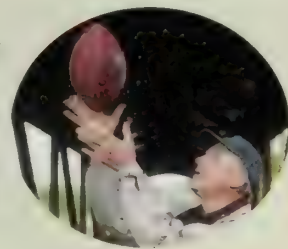


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Up Front

EDITED BY
ROBERT McNATT



FED WATCH

TURNING JUNKYARDS INTO A CRYSTAL BALL

FEDERAL RESERVE CHAIRMAN Alan Greenspan manages the world's largest economy and oversees some of the nation's largest banks. So why did he write a technical treatise, "Motor Vehicle Stocks, Scrapage and Sales" for an obscure academic journal?

The paper, published in August in *The Review of Economics and Statistics* and co-authored with Fed economist Darrel Cohen, aims to come up with a more accu-



GREENSPAN:
Keeping mum

rate way to forecast car sales. Littered with lengthy mathematical equations and densely worded arguments, the article is, say Fed officials, the first academic journal piece ever written by a sitting chairman.

Five years in the making, it delves into a subject—auto scrapping—that few policymakers care about. It doesn't just try to determine what motivates consumers to buy, it asks why car owners decide to junk their vehicles, in the belief that such decisions also affect sales. Plug some variables into equations that represent those decisions, and you get a forecast. But despite the out-of-the-box approach, in one way the paper is vintage Greenspan. Neither he nor other Fed officials are saying exactly what the current forecast is. *Rich Miller*

TAXING MATTERS

DEATH WITHOUT TAXES? NOT SO FAST

EVEN IN DEATH, AND EVEN overseas, the taxman cometh. The heirs of Ted Arison, best known as the founder of Carnival Cruise Lines, may be in for a substantial tax bill, thanks to the way the U.S. tax code treats emigrants.

Arison was born in Palestine but made his fortune in the U.S. He died on Oct. 1 at age 75 in Israel, having moved back there in 1990. An American citizen, however, must live abroad for 10 years to be considered, for tax purposes, a foreign resident. Arison only lived in Israel for nine. So his estimat-



ARISON

ed \$5 billion estate could be subject to estate taxes as high as 55%. Israel has no estate tax.

Bruce Stone, a Miami attorney representing Arison, declined to comment. But legal experts say that Arison's estate might be set up in such a way that it does not even enter probate, a common practice among the wealthy.

Arison, survived by son Micky, who now runs Carnival, and daughter Shari, who oversees his Israeli investments, were clearly aware of the approaching tax problem. "All I know is my lawyer, he told me... 'You'd better live for 10 years,'" he said in a 1996 deposition. "That's it. So I'm trying." *Dennis Blank*

TALK SHOW "There is an overwhelming medical and scientific consensus that cigarette smoking causes lung cancer, heart disease, emphysema and other serious diseases in smokers."

—New posting on the Philip Morris Web site

AFTERLIVES

OUT OF OFFICE, BUT IN FASHION

CARL BILD, THE FORMER Prime Minister of Sweden, is making the journey from the Riksdag to the rag trade, courtesy of the Internet.

Bildt has found a new career, agreeing to serve on the advisory board of the fast-growing Stockholm-based startup dressmart.com, which sells men's business-wear. "I am committed to the revitalization of Sweden, not least through development of the new economy and infor-



BILD:
New career

mation technology," Bildt says. For dressmart.com, he will use his heft a few days a month to open doors to heavy hitters as the company expands outside the Nordic region. "Carl Bildt will help us globalize dressmart," says the company co-founder, Markus Lasso. By yearend, the dressmart.com site hopes to be open in seven European countries and the U.S. The company wants to go public eventually. In the meantime, Bildt has received stock options, but no salary.

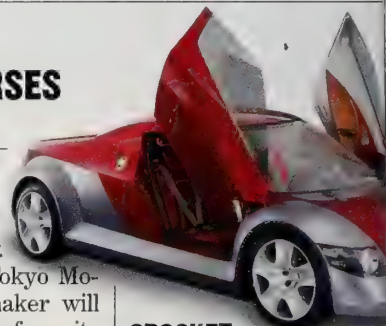
Bildt resigned as leader of Sweden's opposition right-wing Moderate Party earlier this year, and withdrew from politics. He does plan, however, to remain active in the diplomatic world. He is currently the European Union's Special Representative for the former Yugoslavia. *William Eckstein*

CAR TALK

HONDA REHEARSES A PICKUP LINE

IS HONDA THINKING of producing a pickup truck? It certainly looks that way. On Oct. 20, at the Tokyo Motor Show, the carmaker will unveil a concept car from its North American design studio that looks suspiciously like a next-generation convertible pickup. The Spocket is a sporty two-seater with four-wheel drive and a flatbed in the rear. Yet it can slide the roof back and roll the rear windows down, and it's a two-seater sports car.

The Spocket isn't a full-bore pickup: It packs only a 1.3-liter engine. Honda insists it has no plans to manufacture the truck anytime soon. "It's a creative exercise at this point," says a Honda spokesman. Yet designers say that Honda



SPOCKET:

Sporty President Hiroshi

Yoshino reviewed the Spocket recently and liked it.

New mini sport-utility vehicles, and pickup trucks

from the Japanese

already started to trespass on Detroit's truck territory. Honda's redesigned \$22,000 Odyssey minivan, launched last October, is luring buyers away from both Chrysler's \$22,000 Voyager and Ford's \$19,000 Windstar. If Honda finds a way to actually roll out the average clunky pickup, Detroit may really be in trouble. *Emily Thorpe*



Re-birth announcement.







iMac

You hear this: iMac is the first computer to integrate Harman Kardon's new micro-speakers, which deliver ultra-clean stereo sound across a wide dynamic range.

Instant gratification. No more waiting through a long startup. iMac wakes up right where you left off last time.

All-new recipe.

600MHz Pentium III: 8.1

400MHz iMac: 13.1

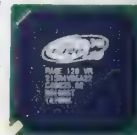
BYTEmark Integer Index Processor Scores

Speed thrills. The G3 chip in every iMac (up to 400MHz) out-duels even the fastest Pentium III processor in PCs costing twice as much.

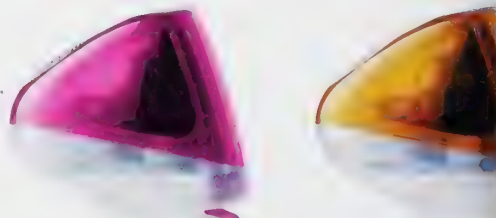


Silence is golden. Unlike PCs, iMac doesn't need a fan inside. It's ingeniously engineered to be the world's quietest desktop computer.

Let the games begin. A built-in ATI RAGE 128 VR graphics accelerator with 8MB of graphics memory lets you play the most hyper-realistic 3D games. (We've included two to get you started.)



Music to the eyes. iMac has been resculpted so it's smaller, sleeker and more translucent. Still in five flavors (DV model), plus a new Special Edition in Graphite.



Strawberry

Tangerine



In a minute, by the internet.
Plug in, connect the phone.
Open up the iMac to see the
guide. You'll be working
on the world in 10 minutes.



Every iMac comes with a generous 64MB of memory
(128 MB in the Special Edition model). But if you
ever need more, just open the easy-access memory
compartment with the twist of a coin – and upgrade
all the way to 512MB.



every ingredients.

Easy loading. The new iMac is
the first computer to feature
an elegant slot-loading CD or
DVD drive. No more sliding trays to
fumble with as you load software,
music CDs or DVD movies.



AppleWorks 5



Point and plug.
A new easy-access
side panel makes
connecting the built-in
56K modem, Ethernet, USB and high-
speed FireWire® (in DV models) a snap.



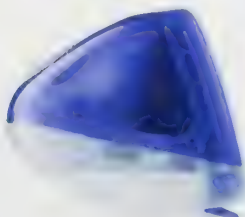
Blazing peripherals.
iMac DV models
have superfast FireWire
built in, so you can
easily connect to high-speed
devices like digital camcorders
and external disk drives.



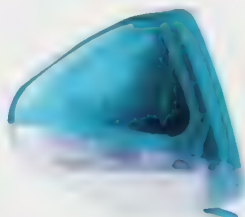
Expand at will. Dual-channel USB
lets you add over 100 devices –
from joysticks to Zip drives – with
no reconfiguring or restarting.



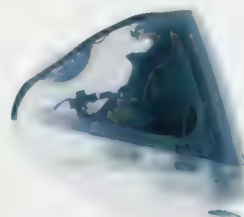
Lime



Grape



Blueberry



Graphite



Presenting the all-new iMac. (Actually, three of them.)

Just over a year ago, iMac™ was born.

Already two million people have discovered it's the fastest, easiest route to the Internet. And a far more colorful one.

What could follow the world's most popular home and classroom computer? A completely new iMac, redesigned from top to bottom, inside and out – and available in three new models.

Now everything you love about iMac is, well, more lovable. It's sleeker, smaller, friendlier and faster (with a G3 chip that out-races even the fastest Pentium III).* And our new DV models feature Apple's groundbreaking digital video technology. So you can play DVD movies right on your iMac, or connect your digital camcorder to create pro-quality home movies.

In other words, it's exactly what you'd expect from an iMac: The computer that makes amazing things amazingly simple.







Superfast FireWire is built into every iMac DV model. So you can directly transfer your videos from digital camcorder to iMac and back again - in pristine digital quality.



With iMac's new iMovie™ software, you're the director. Re-arrange scenes, cut out boring parts, add dissolves, cross fades and other transitions. Then end your epic properly - with scrolling credits.



Feeling electric? Acoustic? Spice up your flicks with music from your favorite CDs. And make it sound as great as it looks.

Or make them yourself.



Presenting the next revolution: Desktop Video. With the iMac DV models, it's easy to bring out your inner Spielberg. Just connect your digital camcorder to iMac's built-in FireWire port and launch iMac's new iMovie software.

Next, digitally transfer your video footage into iMac (with zero loss of quality) and start directing: Re-arrange scenes. Trim out the boring parts. Add transitions, special effects, scrolling titles - even your own soundtrack.

Then send your finished movie back through the camcorder to make VHS copies. Or send clips to friends via e-mail. Or even post them on your website. With iMac, you've got everything you need to go Hollywood. Except, of course, a really good agent.



Crash	0:06
Applause	0:06
Clapping	0:04
Mark	0:01
Roll	0:03

crash, bang, boom. Applause. iMac makes it easy to add sound effects to your movie.



Send your finished masterpiece back to your digital camcorder to make VHS copies. Now all your friends can enjoy it, whether they own a computer or not.



The world is your audience. Turn your home movie into a QuickTime movie. Then you can e-mail it to friends and family. Or post it on the Internet.



Play the classics.



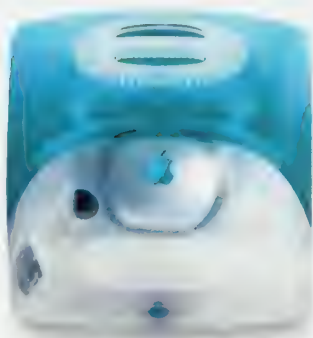
iMac meets Hollywood. With the iMac DV models, just slide a DVD movie* into the slot and instantly turn your iMac into a personal movie theater. With its full-screen, high-res image, the show is positively cinematic — complete with heart-thumping sound.

iMac gives you all the benefits of movies on DVD, including direct access to your favorite scenes and extra material you won't find on traditional videos. It can save you money, too. Because now you don't have to buy an extra TV and DVD player for the kid's room, den or classroom.

iMac comes with everything you need to start watching DVD movies right out of the box. (Popcorn optional.)

Multiple choice. (Any answer is correct.)

iMac: \$999.
350MHz G3 processor,
64MB memory,
56K modem,**
6GB disk storage,
slot-loading CD-ROM
drive. Harman Kardon



stereo micro-speakers,
dual USB ports,
10/100Mbps Ethernet.
Includes AppleWorks,
Internet Explorer,
3D games and more.
Color: Blueberry.



iMac DV: \$1299. All the features of iMac, plus: 400MHz G3 processor, slot-loading DVD drive, 10GB disk storage,
dual 400Mbps FireWire ports, iMovie video editing software. Colors: Tangerine, Strawberry, Blueberry, Grape, Lime.

iMac DV
Special Edition:
\$1499.



All the features of iMac DV,
plus: 128MB memory
and 13GB disk storage.
Color: Graphite.



Think different.



7:48 am. Dad's on pancake duty. And cruising the Internet for stock quotes, world news and delicious details from last night's game.



7:48 am. Alex uses his iBook™ to check his favorite game website for the latest on new releases.

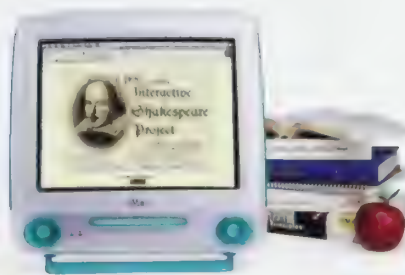
From the
classroom

What could be more amazing than surfing the Internet?
How about surfing the Internet without any wires tethering
you to the phone line?

Welcome to Apple's new AirPort™ wireless networking.

All you have to do is plug the AirPort Base Station into your phone line, cable modem, DSL modem
or Ethernet network. Then slip an AirPort card into your iMac and you're cleared for takeoff.

Up to ten iMacs (or iBooks) can share a single AirPort Base Station to connect to the Internet, and can



7:48 am. Erin uses her new iMac to conduct web research on Shakespeare while getting ready for school.



7:48 am. Mom scours the web for travel deals while she proofs the term paper Alex just sent via his wireless connection.

be anywhere within 150 feet of the base station — literally half a football field away.* All ten users can visit different websites simultaneously, or exchange files, or play the latest network games with each other — all without any wires.

There's no longer any need to worry about placing your iMac near a phone line or tearing up your walls to rewire. You can put your iMac wherever you want, and change your mind as often as you want.

The future of the Internet has definitely arrived. No strings attached.

The easiest way to connect to the Internet.

Amazing, but true: 90% of all iMac owners are connected to the Internet*. And most of them got there on the very first day. That's because iMac's setup instructions are stunningly uncomplicated:

Plug in, connect the phone line and answer a few simple questions. Presto, instant Internet.

Now you're sharing e-mail with friends and family. Shopping in places you never even knew existed. Visiting the world's great museums. Researching projects for school or business. Reuniting with long-lost friends. Exploring the universe. There's literally no limit.

You're a fully certified Internet surfer. All within a few minutes of taking your iMac out of the box.



Up Front

HAL OF IVY

AB CHOO! GOES THE I-SCHOOL ROUTE

NEW YORK CITY COLLEGE is looking for sending forth legions of business students into the nation's center of com-



mer thinks it also has a minor or two to pass along to prospective members of the Four Estate.

Fuchs College, part of the City University of New York, has started to offer a Master's in Business Journalism. The director of the two-

year degree program, Joshua Mills, says that it will help reporters read balance sheets and make sense of IPOs. Those are skills traditional J-schools have ignored, Mills says. "Journalism education has largely turned a blind eye to the growth of business journalism. They missed the boat." Twelve students entered the Baruch program this fall, and Mills hopes to double the number by 2000.

Journalism programs elsewhere, however belatedly, have begun to beef up their business curricula. New York University launched an expanded economics and reporting master's degree this September, while Boston University also offers a master's degree with a concentration in business. It's all a way to develop reporters who know there's more to a newspaper than the metro section.

Mica Schneider

SUPPORT SYSTEMS

HI, I'M JOHN, AND I'M AN ENTREPRENEUR...

EVERYBODY KNOWS ABOUT support groups to help overeaters, alcoholics, and smokers. But what about the well-being and self-esteem of entrepreneurs who deal with office

leaving through and potential employees demanding way too many stock options? Sometimes, only one else who's the bug can understand. It's not to be a headstrong twentysomething willing to risk everything for a shot at the Amazon.com. That's why Ross, 27, chief executive of San Francisco-based Sport Equipment Leasing,

com, founded Gotthebug.com last March. It's an online community devoted to helping executives at struggling startups deal with everything from finding an accountant to learning how to survive without a salary. The group has grown to about 60 entrepreneurs from Silicon Valley to New Hampshire.

Ross, a Stanford grad, got the idea after encountering the loneliness of starting a Net business. "Sometimes it feels like it's you against the world," he explains. "So anyplace you can find support helps reduce the stress." And for his next venture? Ross is considering a new site, Keepthefait.com, for entrepreneurs ready to call it quits.

Linda Himmelstein

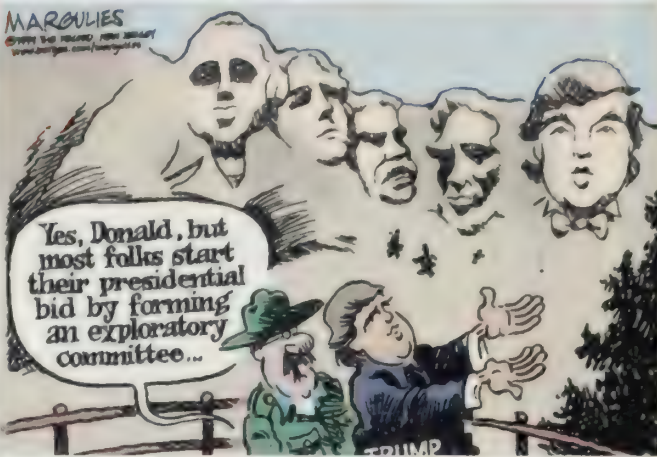
NOTES Students, 12 to 17, who report ever having had classes discussing savings or investing: in 1999, 56%; in 1998, 44%

DRAWN & QUARTERED

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SPORTS BIZ

GOLF CLUBS ONLINE: A BETTER IDEA?

THERE ARE 67 SITES ON Yahoo! selling golf clubs, but only one claims to have its own dot.com, made-to-order brand. Chipshot.com is betting on that innovation to help it stand out among the glut of e-biz golf merchandisers.

Amar Goel, the twentysomething chief executive who started chipshot.com in 1995 with \$350, says it has since attracted \$21 million in venture funds. Goel wants chipshot.com to be to golf clubs what Dell Computer is to PCs: the dominant direct seller. With custom clubs for sale on many sites, Goel says that chipshot.com needs more than just low prices to prosper,

though it has those too. Its XT-55 Custom Iron with a graphite shaft, for example, compares favorably, pricewise, with the Cobra's \$109 Gravity Back Iron. The company says it sells 5,000 clubs a week—though not all are its own.

So far, however, chipshot pulls in only 1 million page views a month vs. 13 million at SportsLine.com, which has several big golf sites where purchases average \$200 per customer. With an emphasis on sports



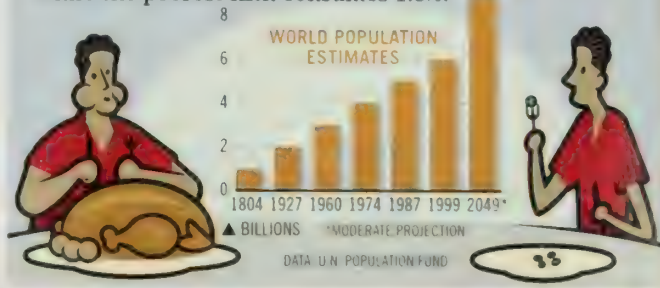
CHIPSHOT'S custom gear

news, SportsLine believes content drives sales, since almost all fans are players. Chipshot thinks its name is enough to lure buyers from bigger sites.

THE BIG PICTURE

MORE PEOPLE, BUT HOW WELL OFF?

With the world population now at 6 billion, the impact of the consumption gap grows larger: The richest 20% of humanity consumes 86% of all goods and services, while the poorest fifth consumes 1.3%.





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(And you thought we just sold mutual funds.)

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IN PRAISE OF BREAKTHROUGH TECHNOLOGIES

The introductory article of "The Internet Age" (Cover Story, Oct. 4) prompts me to point out some missing bytes of information. In October, 1969, researchers at the University of California at Los Angeles indeed tested the first host-to-host computer transmission. The unnamed colleagues at the other end of the phone line in Menlo Park, Calif., were at Stanford Research Institute, now known as SRI International. And while the SRI system crashed when the first word "login" was automatically completed by the receiving host, SRI immediately realized the problem, and a second attempt was successful. Both the UCLA and SRI systems had been crashing during the debugging period that preceded the successful login; what is notable, of course, is not the crash, but the success.

The "bankrollers at the Pentagon" were at the Advanced Research Projects Agency; hence the name ARPANET was coined for the network that grew from that first connection. ARPA's goal was not to design a network that could survive a nuclear attack but to leverage the military's investment in computers for interactive computing. (Coincidentally, a completely separate investigation at the Rand Corp. was exploring similar techniques for survivability rea-

sons.) Led by Doug Engelbart, the team's innovations included hypertext, groupware, teleconferencing, and the computer mouse.

Engelbart's vision was, and still is, extraordinary. In 1970, he predicted "there will emerge a new marketplace representing fantastic wealth in commodities of knowledge, service, information, processing, storage, etc." The Engelbart continues to pursue the evolution of tool systems and human systems to position individuals, organizations, and society to solve urgent and more complex problems.

Alice Gallo
 Senior Director
 Corporate Communications
 SRI International
 Menlo Park, CA

You stated that the "telephone" perhaps the greatest breakthrough in information technology, ever." This is the case. Many years before the telephone, the telegraph was born: Up to that time, information could go only as fast as someone could carry it by hand. At that moment, telegraphic information could be transported at the speed of light, and, in theory, to anywhere in the world where a wire or cable was strung. The telephone was just a modification of electrical impulse through wire.

You also stated that without the telephone, large-scale, centrally managed

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LECTIONS & CLARIFICATIONS

ble in "Legal wrangling won't restore inforest" (Environment, Oct. 11) I have said that Texaco Inc. committed remediation of drilling sites in 1998, not 1988.

caption in "Jerry Barton vs. the Unitates" (People, Oct. 18), Robert M. and Barry G. Hon were misidentified. I am the one in the red sweater.

communications such as General Motors would be impossible. Until the advent of microwave transmission (and satellites), the long-distance phone was terribly expensive, and labor-intensive as well. I would guess these businesses used the telegraph as a primary communication user as it was much cheaper and almost as fast. I can remember buying and sending telegrams in my business as late as the 1960s.

George B. Freeland
Orinda, Calif.

BALL: HOW RICH TEAMS WOULD SUBSIDIZE POOR ONES

I am a loyal Pittsburgh Pirates fan who hate what the large-market teams are doing to baseball ("And then there is 28," Sports Business, Oct. 4). I have my own suggestions to make:

• Pirates and other small-market teams must notify the Braves, Cubs, Yankees, and Yankees that they will be allowed to televise their away games unless they pay 50% of their TV revenues from those games to the home team. If the mega-teams balk, the home team should just forfeit the game and there will be no TV revenue for anyone. The superstation shows reruns of the game. This will work only if the home team is serious and the fans heartily support the effort.

• Owners in the small markets could tap into local fans' resentment by organizing them into a potent third something now missing in the economic equation. The folks in Kansas Mo., are already primed for such action. Fan involvement is important because even with the increased revenue from new stadiums, small-market teams will still be dramatically outperformed by teams in major media cities. Of course, Ted Turner and George Brenner would threaten to sue. I will let them.

The rallying cry for us lowly peasants here in the provinces should be "No pay, no play. No pay, no way."

Bob Keir
Avalon, Pa.

GET READY FOR CONCEPTION CONTROL

The implications of John Donohue and Steven Levitt's study go far beyond legalized abortion ("Does abortion lower the crime rate?" Economic Viewpoint, Sept. 27). Unwanted children are particularly likely to be abused and neglected, to suffer miserably themselves, and later on to cause major problems for the rest of society. But legalized abortion is only one possible response.

More widespread and effective programs to help people control conception would be a more advantageous solution. However, all known methods for controlling conception work only when the individuals involved use them properly, and the most dangerous source of unwanted children is probably those people most lacking in personal responsibility.

The truly rational and moral solution is to make conception an event that requires a conscious, affirmative decision by the would-be parents. This solution is

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within reach technically but is sufficiently remote socially to make Robert J. Barro's phrases "explosive politically" and "cause a major ruckus" seem understated. Nevertheless, it is time to begin discussing social policies that would require deliberate action before conception can occur.

Richard P. Boyle
Senior research scientist
Institute for Social Research
University of New Mexico
Albuquerque

ONLINE RECRUITING: TOO MUCH IS RIDING ON A RESUME

I take issue with the assertion in "The search for the young and gifted" (Business Management, "The Internet Age," Oct. 4) that Internet recruiting can be more interactive and personalized than the old paper-based way. It definitely has its place. With organizations such as Cisco Systems Inc. receiving 20,000 résumés a month, it is without a doubt a great time-saver.

However, as a graduating MBA, I have seen this tool taken well beyond its meaningful utility. Recently, more and more recruiting events have been reduced to little more than further Web sites to upload résumés to. It is becoming more convenient for local companies to use the events as a way to gather more fodder for their search engines (i.e., "the following companies will be screening the database....") than to send representatives to talk to us.

No longer able to use these events as opportunities to network, my chances of landing an interview have very little to do with my ability to make a professional impression and everything to do with how carefully I have crafted my résumé to include as many of the right buzz words as possible. Interactive? Personalized? Far from it. The lesson: Just because something can be done online doesn't mean it should.

Keith Hoagland
Boulder, Colo.

THE HIGH HURDLES THAT ENZYME RESEARCHERS FACE

In "Evolution on fast-forward" (Science & Technology, Sept. 27), you neglected to mention one crucial point about technological advance: Finding a one-in-a-billion enzyme variant requires a truly massive screening effort if it is to succeed. Up until now, finding new enzymes that display modest improvements has been a relatively easy task. This first wave of directed evolution

technology created small libraries of mutant enzymes and then screened the members of those libraries one by one.

But to find the truly rare enzyme with radically different properties requires much larger libraries and much more efficient screening technology. This second wave of technology incorporates massively parallel, imaging-based techniques to sift rapidly through enormous libraries of mutants. This is the only way that large-scale improvements in biocatalysts are likely to be found.

Mary M. Yang
President and CEO
KAIVOS Scientific Inc.
Santa Clara, Calif.

RETIRED EXECs FORM A VALUABLE BRAIN TRUST

In reporting on Corporate America's age-related "Brain drain" (Cover Story, Sept. 20) Jennifer Reingold and Diane Brady captured a phenomenon that transcends function and industry: the loss of intellectual capital due to the departure of older executives from the workforce. However, these senior executives who are draining out of the corporation are forming a brain trust that businesses can tap into as needed. This brain trust is one of the fastest-growing segments in the workforce and is sometimes referred to as portable executives or contingency workers.

As baby boomers "retire" at an ever-younger age, the interim executives who form this brain trust will become an important factor in the quest for talent. Businesses that take advantage of older executives will enjoy a significant competitive advantage.

John A. Thompson
Stamford, Conn.

WHAT RJR IS DOING TO KEEP KIDS OFF CIGARETTES

"Cutting back on tobacco ads" (Economic Trends, Sept. 27) raised interesting points. As you are aware, the settlement with the states' attorneys general resolves many of the issues regarding underage smoking and cigarette marketing. In addition to the multibillion-dollar payments each state stands to receive, the settlement also placed the cigarette industry under severe restrictions on our marketing practices. These include bans on the use of billboard advertising, cartoon characters, brand-logo merchandise, and movie placements. The agreement also restricts promotional programs, sampling, lobbying, and event sponsorships.

The settlement will provide the up to \$246 billion over 25 years to sign, implement, and enforce programs including a \$1.5 billion trust fund to use by states and public health groups to address underage smoking. In many, we at R.J. Reynolds Tobacco would like to see a large portion of these funds directed toward reducing youth smoking rates. We remain hopeful that the states will elect to use a proper amount of these financial resources to develop tailored youth smoking programs. Since 1991, Reynolds Tobacco has funded a nonsmoking program teaching kids to resist peer pressure. This program addresses the fact that peer pressure and not advertising, has been shown to be the primary factor in youth smoking.

At RJR Tobacco, we believe youth should not smoke. The risk of contracting lung cancer and heart disease is higher for those who smoke than for those who don't. RJR Tobacco actively supports efforts to prevent underage smoking. But a ban on all advertisements is both unwarranted and unnecessary.

Chris Galanter
Director
Financial Communications
R.J. Reynolds Tobacco
Winston-Salem, N.C.

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TEST
Secret History of the American Meritocracy
 Nicholas Lemann
 Straus & Giroux • 406pp • \$27

HOW THE SATs CHANGED AMERICA

If you are looking for reading that investigates one of the most important recent developments in our society. You should choose: One of the many, many books from Silicon Valley. A volume on globalization. A history of the Educational Testing Service and its impact on the U.S. Well, surely not (c), right? Wrong. Because Nicholas Lemann's *Big Test: The Secret History of the American Meritocracy* is one of the astute and disquieting efforts of reason. What begins as a chronicle of evolution of standardized testing is a penetrating commentary on a frantic skirmish for a place in professional upper middle class. Lemann shows how our educational system of the United States' great social contributions," has been a giant—and somewhat rigged—machine. Moreover, even though by mid-book you may wonder where it's all leading, *Big Test* is a very enjoyable read. Largely because Lemann, a *New Yorker* staff writer and the author of *Promised Land: The Great Black Migration and How It Changed America*, delivers his analysis through a series of biographical sketches. The book begins by describing how a key member of the Establishment about transforming America's using the application of standardized testing and new university admission policies. Concerned that America in the 1940s was developing an undemocratic, hereditary ruling class, Harvard University President James Bryant Conant worked to make U.S. universities a breeding ground for "a new one: a group of brainy, elaborately trained, spirited people drawn from every race and every background." Simultaneously, Educational Testing Service

chief Henry Chauncey was waging a holy war on behalf of standardized tests. (A man who "loved everything about testing," he frequently tested himself and, prompted by an unhappy home life, pondered "marriage compatibility" exams.) By the early 1960s, the duo and their allies had made the once little-used SAT a standard hurdle for admission to the country's prime universities. Meanwhile, two seminal academic leaders of that decade, University of California President Clark Kerr and Yale University President Kingman Brewster Jr., were helping to transform higher education into a hierarchical complex of institutions topped by large, research-oriented universities.

The effort to remake the country's elite largely succeeded. But there were a host of unintended consequences. First, contrary to Conant's wishes, the new test-savvy elite wasn't much interested in public service. Instead, the author says, such a "Mandarin" typically became a "well-paid, securely positioned provider of expert advice: corporate lawyer, investment banker, management consultant, high-end specialized doctor." As a result, most people saw the testing and sorting, followed by elite-college admission or refusal, not as a way of improving society through scientific management of its intellectual resources. Rather, they felt it was merely "a way of determining how big a share of America's goodies they'd get." In response, there soon arose a test-preparation industry, pioneered by Stanley Kaplan, a lower-middle-class striver who is the subject of another fascinating Lemann profile.

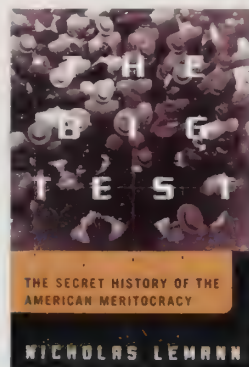
Then the educators' scheme set off a national debate on how best to bal-

ance the sometimes conflicting ideals of equal opportunity for all and a better deal for the downtrodden. Since members of minority groups generally performed poorly on standardized tests, universities and government in time decided to take special measures—effectively creating another favored elite, those benefiting from affirmative action. Soon, yet another social group emerged—a resentful one, primarily composed of whites who had gotten nudged aside under the rigorous new placement scheme. Among other things, this final bunch would become the social basis for Proposition 209, the 1996 California ballot initiative aimed at abolishing affirmative action.

Lemann makes these social strata real by providing flesh-and-blood representatives. There is, for example, Bill Lann Lee, the smart Chinese kid out of Harlem who won spots at Yale and Columbia University School of Law and ultimately became U.S. Assistant Attorney General for Civil Rights. Molly Munger, an idealistic, white Southern Californian, finds that, because "the deck had been shuffled only once," the new order hasn't made for a better America. In time, she places her Harvard Law credentials in the service of the NAACP Legal Defense Fund. Marginalized California academics Glynn Custred and Thomas Wood, the developers of the idea of Prop 209, will become her key antagonists. Finally, teasing and manipulating the aspirations and resentments of all of these people are our political leaders, particularly that embodiment of Lemann's Mandarin order, William Jefferson Clinton, Yale University law school, 1973.

Lemann, himself a graduate of Harvard College, ends by challenging the entire "meritocratic" idea. Conant and his allies, he observes, had futilely tried to "undermine social rank by setting up an elaborate process of ranking." Instead, Lemann says, we should be trying to design "a society without a specially anointed group at the top of it." A utopian wish? Well, the effort would certainly put U.S. society to the test.

BY HARDY GREEN
 Green is BUSINESS WEEK'S Books Editor.



THE TESTS HELPED CREATE A NEW MERITOCRACY, BUT ONE MAINLY INTERESTED IN MORE "GOODIES"

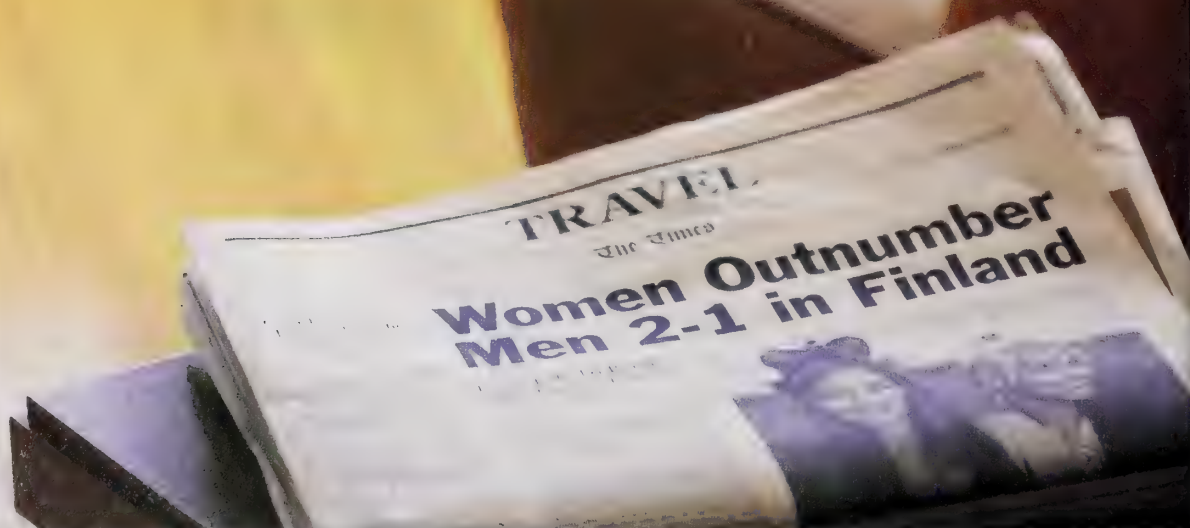
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Books

BOOK BRIEF

THE FABULOUS HISTORY OF THE DISMAL SWAMP COMPANY

A Story of George Washington's Times

By Charles Royster

Knopf • 622pp • \$35

YE OLDE FIASCO

Thick with white cedar and cypress, the Dismal Swamp appeared "ceeding rich" to a young George Washington. Located on the North Carolina-Virginia frontier, the virgin 900 square-mile area seemed a profitable land for the 12 esteemed Virginians (including Washington) who in 1763 founded the Dismal Swamp Co. with hopes of converting it to farmland.

The fate of that company is the subject of Charles Royster's *The Fabulous History of the Dismal Swamp Company*, an exhaustive tale of a pre-Revolutionary economy driven by speculation and deep personal indebtedness. Those expecting a full account of Washington as entrepreneur will be disappointed: His involvement with the company was minimal. Royster

instead homes in on the company's other 11 partners, a collection of colorful bureaucrats and tobacco traders including Virginia patriarch William Byrd.

With a just-the-facts style, Royce Boyd Professor of History at Louisiana State University, shows how trading tobacco to England was less business than blind bet. But *Fabulous History* is strongest when it concentrates on the swamp company. Facing a dearth of vegetation, the partners' slaves made little progress on the initial drainage scheme. A second plan to cultivate hemp never won support. Before long, the enterprise was reduced to felling timber for roofing shingles. As decades passed, the swamp remained fallow, with shareholders in the company scattered to surviving grandsons and great-grandsons.

In 1810, 47 years after its founding, the Dismal Swamp Co. paid its first dividends. Only one original partner survived to collect a return. Likewise readers, *Fabulous History* requires common endurance. Its ultimate payoff is insight into a business culture that may seem all too familiar.

BY DENNIS BERNARD



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BY STEPHEN H. WILDSTROM

AN APPLE READY FOR HARD KNOCKS

The iBook portable will hold up well under the wear and tear of school

Judging by how hard it is to get one, it seems that Apple Computer hit the sweet spot of the consumer market with its new iBook portables. The combination of some clever marketing and a visually exciting design has made the blue- or orange-and-white iBooks very appealing to retail customers in a world of look-alike, work-alike laptops.

In fact, the iBook is perfectly acceptable as a consumer notebook, even if at \$1,599, it's somewhat overpriced and underfeatured. The true value of this innovative design will become apparent when it is used in the arena for which it was really created—school.

SCHOOL SMARTS. Many design decisions that seem odd in a product for homes become exciting in a product designed for students. Take the handle, which seems a superfluous addition at first glance. Kids, however, have a hard time holding a laptop between thumb and forefinger the way adults do. Besides, the handle isn't just a handle. The solid aluminum rod that runs through it is part of a tough hinge. And passing a cable through the loop allows a classroom's worth of iBooks to be secured with a single lock.

Other little touches make the iBook well suited to school use. The top is held

shut by spring loading rather than a latch because latches break under rough handling. Two recessed contacts on the bottom allow a number of iBooks to be charged at once in a special rack or cart. The generous margins of tough plastic and rubber around the screen, which make the display seem even smaller than

knocks. As compensation, the battery life of more than five hours is exceptional.

One of the most interesting features of the iBook, the built-in wireless networking, will eventually become important in the home, but it's ideal for schools. A \$99 AirCard installs under the keyboard and, using an antenna built into the cover of the iBook, communicates with the \$299 AirPort Base Station at 11 megabits per second. The base station includes a 56K modem that allows a number of iBooks to share a dial-up Internet connection, or it can link the iBooks to a wired Ethernet network. (The iBook also comes with a stan-

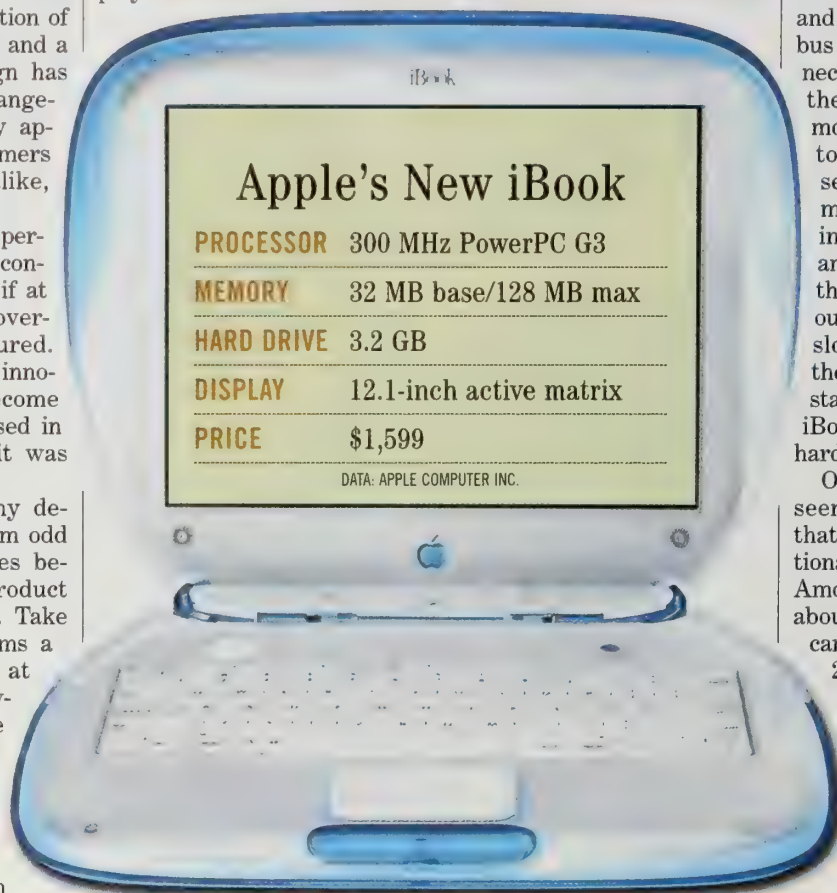
than the cost of running ethernet cable.

I couldn't test the system because the base station won't be out until November. But I recently attended a conference where 200 Windows laptops communicating using the same wireless working technology, a standard called IEEE 802.11. AirPort is compatible with networking systems from 3Com, Symbol Technologies, Lucent Technologies, and others. Apple also has put AirPort into its new iMac G4 desktops.

PUNY DRIVE. There are a few things I don't like about iBook design. Like the iBook, it has no built-in floppy drive and uses the universal serial bus as its only way to connect accessories. I don't like the floppy or the old modem and printer connectors, but I wish it had a second USB jack. Plug a mouse, for example, to take the place of the touchpad, and you can't connect anything else. Even more annoying is the lack of a PC card slot, which means there's no way to connect a standard video camera to the iBook. And the 3.2-gigabyte hard drive is puny.

One reason that the iBook seems relatively priced is that the features for educational use don't come cheap. Among Windows laptops about the same money, you can get a Toshiba Satellite 2590CDT with a faster processor, more memory, and a bigger hard drive. Buyers committed to the Macintosh would probably be better off with an iMac, unless portability is essential.

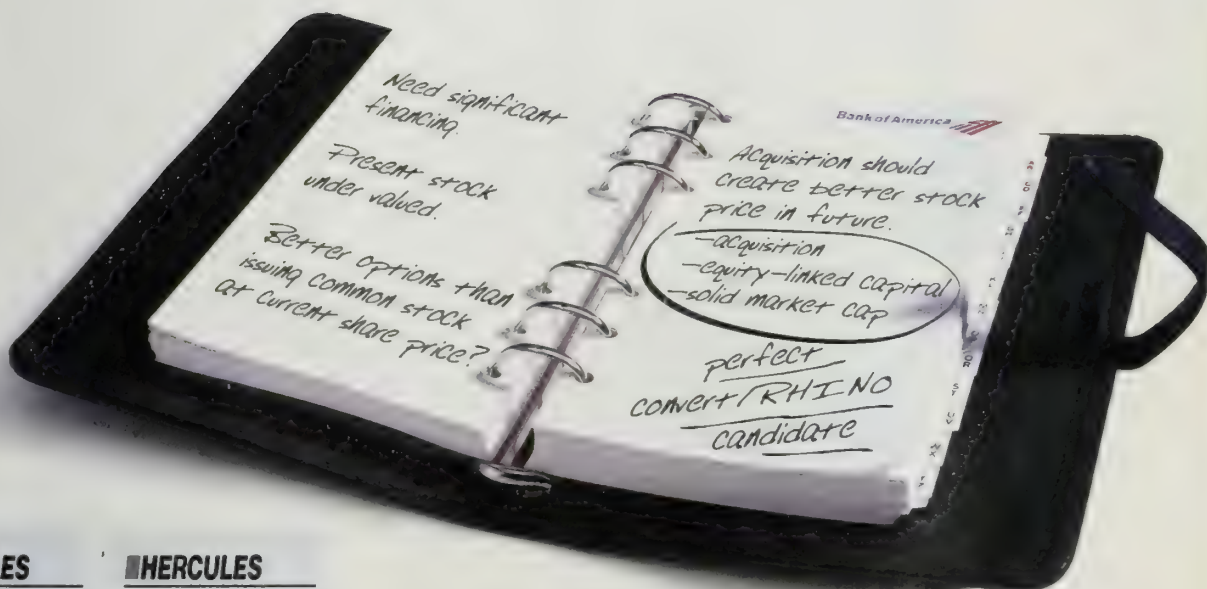
For school use, however, there's nothing like the iBook. With its ability to put computers wherever they're needed in a school, or to allow movement between school and home, the iBook could open a new era in educational computing.



its 12.1-inch size, provide extra protection for a laptop's most vulnerable, and expensive, component. You have to remove two screws and a cover to change the battery—a nuisance, but it's additional protection against hard

standard Ethernet cable jack.) With wireless networking, students will be able to move their computers around the school as long as they stay within some 100 meters of a base station. And \$100 per station is considerably less

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BY LAURA D'ANDREA TYSON

THE MESSAGE IN LETTING ECUADOR DEFAULT



HANDS OFF:
By not mounting a bailout, Washington and the IMF are telling private investors that they ought to be more prudent

Laura D'Andrea Tyson is dean of the Haas School of Business at the University of California at Berkeley and was President Clinton's chief economic adviser.

In early 1995, over the strong objections of both Democratic and Republican congressional leaders, the Clinton Administration mobilized an international rescue package of \$50 billion to prevent a Mexican default. It did so despite great uncertainty that the package would succeed in restoring investor confidence in Mexico and despite polls indicating that most Americans opposed a Mexican "bailout."

Why did the Clinton Administration take the risk? First, the U.S. has strong strategic interests in Mexico's economic and political well-being. A prolonged recession in Mexico threatened to destabilize its politics, undermine its fledgling transition to a market economy, and spawn flows of illegal immigrants across U.S. borders.

Most important, the Mexican crisis threatened the international financial system. The Administration and the Federal Reserve worried that a default might unleash a stampede of private capital out of all emerging-market economies, triggering other defaults, toppling reforms, and undermining global growth. Fear of such "contagion effects" was the primary motivation behind the controversial decision to "bail out" Mexico.

Since the early 1990s, private capital flows to emerging-market economies had surged, dwarfing official capital flows as the dominant source of financing. Private capital had increasingly taken the form of bond and equity instruments in lieu of more traditional bank-syndicated loans. Although the new forms of private lending were plentiful, they were by nature foot-loose, able to move rapidly anytime.

SOBERING LESSONS. The U.S. bailout worked. Mexico avoided default, reaffirmed reform, and began to recover after a short recession. Foreign investors holding on to risky Mexican bonds survived the temporary crisis unharmed. So why has Washington decided to sit on the sidelines as Ecuador becomes the first country ever to default on so-called Brady bonds, which are dollar-denominated bonds partially backed by U.S. Treasury bonds?

Of course, American economic and security interests are not nearly as great in Ecuador as they are in Mexico. And unlike Mexico, Ecuador has not adopted credible policies to address its economic problems.

But the sobering lessons of the financial disruptions that have rocked global capital mar-

kets in the past two years also explain U.S. action on Ecuador. Not only did generous rescue packages for Thailand, Indonesia, and South Korea fail to prevent the crises from spilling over to other countries but they also had the perverse effect of encouraging private investors to take on excessive risks.

Nowhere was this effect more dramatic than in huge purchases of risky Russian government debt by foreign investors who expected to be bailed out in the event of repayment difficulties. This expectation proved unwarranted, and what was revealingly dubbed Wall Street as the "moral hazard play." Russian debt sent the first clear signal that private creditors could be forced to share in the pain of their bad decisions.

NO WINNERS. Ecuador's unilateral decision to default and reschedule some of its debt, with the acquiescence of both the U.S. and the International Monetary Fund is the most onerous and clear signal. True, Ecuador's actions have been ad hoc, lacking in transparency and equal treatment to all investors. But Ecuador has had little choice, since to date progress has been made on developing bilateral rules requiring or encouraging bondholders to participate in necessary debt restructurings. Indeed, private investors have steadfastly opposed a formal restructuring framework, maintaining that they are automatically "bailed into" the pain of national financial crises when asset values plummet. They prefer, they say, to act individually to get the best deal they can at the expense of an embattled debtor, its other private creditors, and whatever official assistance is mobilized on the debtor's behalf.

But history shows clearly that a long delay in rescheduling an unsustainable debt burdens benefits neither a debtor country nor its creditors. And although international guidelines requiring private bondholders to agree to restructuring under certain circumstances could reduce their willingness to lend to emerging market economies, such guidelines would encourage more prudent lending, discourage overborrowing by individual countries, and reduce the likelihood and severity of future financial crises.

That's a risk worth taking. And that's a valuable lesson that the U.S. and the IMF hope to teach private investors by sitting on the sidelines as Ecuador negotiates with private creditors.



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Driving Down Auto Insurance Fraud

CRASH TESTING — A TOOL TO UNDERSTAND SOFT TISSUE INJURY AND HELP DETECT INSURANCE FRAUD.

Soft tissue injury fraud is one of the biggest challenges that the automobile insurance industry is facing today. Billy Cox, director of transportation forensic services at Engineering and Fire Investigations (EFI)—a wholly-owned subsidiary of GAB Robins—explains how insurers can weed out false claims from legitimate ones using data derived from crash testing.

Q: What is a soft tissue injury?

A: After a truck or automobile accident, victims often complain of "soreness" or "stiffness." Usually, these kinds of injuries take place in the neck or back. Unfortunately, these injuries are often characterized by a lack of objective physical evidence—the kind of evidence that shows up on an X-ray or a CT scan, for example. This makes the diagnosis of these problems much more subjective than, say, a broken bone or sprain. While many people do legitimately suffer from soft tissue injuries after accidents, many other people use their subjective nature to commit fraud.

Q: How big a problem is soft tissue injury fraud?

A: Huge. Industry research suggests that auto insurance fraud is a \$20 billion a year business, and that baseless soft tissue damage claims constitutes the biggest category of crime. This is because soft tissue injuries are one of the most frequent claims, and also because treatment for such injuries can be expensive and ongoing. That said, in about 40% of the accident cases that are referred to us, we conclude that victims probably did sustain a soft tissue injury. So insurance companies have to make sure that they don't deny legitimate claims in their zeal-ousness to weed out the criminals.

Q: How does accident reconstruction help?

A: The field of impact biomechanics has been around for more than 50 years. We use the tools of this engineering discipline—including accident reconstruction—to help understand how automobile crashes impact passengers physically. We conduct both low- and high-speed crash tests that are designed to show what kinds of soft tissue injuries passengers could sustain. We also examine what the stress threshold is for soft tissue injuries, and how the type of accident changes the kinds of injuries passengers sustain.

Q: How do you use this data?

A: So far, we have conducted more than 100 crash tests and 60 tests using an impact sled. We have added this data to



EFI high-speed crash test gathers data to predict likelihood of soft tissue injuries.



Billy Cox, Director of Transportation Forensic Services at Engineering and Fire Investigations

our proprietary database of more than 1,000 crashes that we have investigated over a 10-year period of time. Combining these resources, we can predict whether or not a person will sustain tissue damage in a crash, and what kinds of injuries they are most likely to receive based on the dynamics of the crash.

Q: How can this data save insurance companies money?

A: Based on the experiences of our current customers, we estimate that an insurer that writes about \$300 million in premiums each year will save more than \$1 million as a result of our diagnostic services. That savings comes not just from detecting likely cases of fraud, but also from avoiding litigation. And when insurers avoid the costs, they don't have to raise their premium rates to cover fraud-related expenses.

Q: How much experience does GAB Robins, as a firm, have in this kind of analysis?

A: The professionals who work for EFI have decades of experience, and the firm

that were merged in 1997 to form GAB Robins were founded in the mid-1970s. The firm brings together its extensive portfolio of fire and engineering investigations under one roof. For example, EFI's automotive engineering staff can provide full-motion, color computer simulations of accidents, mechanical examination, disassembly and testing of vehicles, and a wide range of other services. In addition, the firm can analyze roadways, traffic controls, and interconnect automobile systems such as steering, electrical and braking systems.

To find out more about EFI's Transportation Forensic Services, call 1-800-334-0200. For information about other ways that GAB Robins detects and investigates insurance fraud in property and casualty lines, visit our web site at www.gabrobinsna.com.

Clara Van Hast, a New York-based writer, reports frequently on insurance and risk management.

EMERGENCY PROCEDURE

IN THE EVENT OF AN ACCIDENT:

CHECK FOR INJURIES.

CHECK CLAIM AGAINST
STANDARDIZED FRAUD INDICATORS.



Detecting insurance fraud isn't just about conducting an investigation, but determining if a fraud investigation even needs to be done. Review for fraud indicators is just a normal part of GAB Robins' claims handling process because we integrate our Special Investigations Unit (SIU) with our claims operations. And if fraud indicators do show an investigation is needed, our SIU investigators work with the adjuster and client to ensure that each claim is resolved fairly. Questions? answers@gabrobins.com or call 888.888.4242

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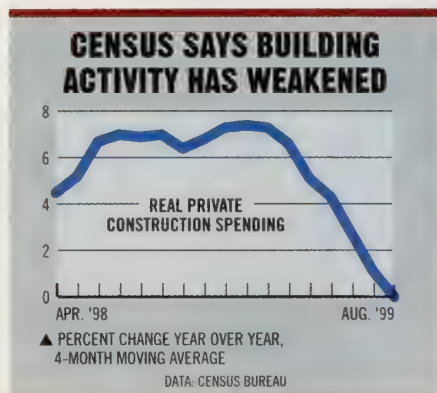
BY GENE KORETZ

IS CONSTRUCTION REALLY SLOWING?

Industry observers have doubts

According to the U.S. Census Bureau, both overall construction activity and residential construction have now fallen for five months in a row. Since construction is one of the most interest-sensitive sectors of the economy, this downward trend is evidence that the Federal Reserve's rate hikes are having their intended effect.

But are they? Despite the Census estimates, many industry and company reports show little if any slackening of demand. In August, sales of new single-family homes clocked a solid 983,000 an-



nual rate, just 2,000 shy of the all-time high recorded in November, 1998. So far this year, in fact, they are running at a 913,000 annual clip—2.6% above last year's record selling rate of 890,000.

Other housing market reports tell a similar story. Existing home sales seem headed for another record year, housing starts in August were up 3.8% above their year-earlier pace, and homebuilders remain highly optimistic. Meanwhile, home prices are running a healthy 5% above their year-ago levels.

"We were expecting a slowdown," says economist David F. Seiders of the National Association of Home Builders, "but things are still pretty darn exuberant." Noting that many home buyers have been shifting to adjustable-rate mortgages to deflect the impact of higher mortgage rates, he sees no real letup in demand so far. "There's a clear disconnect," he says, "between what we're experiencing and the construction downturn reported by the government."

Economist Joseph Carson of Deutsche

Bank Global Markets Research agrees. He points out that one sensitive measure of construction activity, the construction contract index of F. W. Dodge Div./The McGraw-Hill Cos., has been steadily revised upward this year—possibly, he thinks, because data tend to be reported late when developers and contractors are very busy. As of August, the index for the first quarter stood 17% above the initial monthly estimates, and the second quarter was up 12%. "If past revisions are any guide," he says, "we will see more large upward revisions for recent months."

To Carson, all of this indicates that the government missed the boat. Besides residential building, he sees signs of rising activity in recent reports of warehouse building by Internet companies, office and hotel construction in major cities, and announcements of new government infrastructure projects.

For his part, Seiders thinks it's possible that the reported recent construction slowdown did take place—but because of supply rather than demand problems. "We've had widespread reports of shortages of building materials and construction workers, and that's hampering activity," he says.

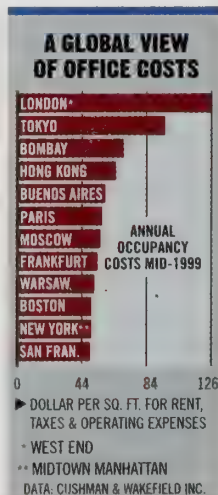
To the Fed, of course, neither Carson's nor Seiders' view is reassuring. If construction demand remains basically strong, there may be little chance of a near-term economic slowdown.

WHERE OFFICE RENTS ARE DEAR

London's West End is out of sight

Over the past year, prime office rents and other occupancy costs rose 11% to 27% in New York, San Francisco, and Boston. But a Cushman & Wakefield survey finds that these cities are still cheaper for renters than a dozen other sites around the globe.

The priciest city remains London, whose occupancy costs are 32% higher than Tokyo's and double those of Hong Kong. New Delhi and Bombay are



also high on the list, as are Paris, Buenos Aires. And though its costs down 31% since last year, Moscow is still among the most expensive venues.

The cheapest office sites, with occupancy costs ranging from \$5 to \$16 per sq. ft., include South African cities Johannesburg and Capetown, Bangkok, Abu Dhabi, and Montreal.

HELPING CLOSE THE GENDER GAP

Competition limits discrimination

In the 1980s, the disparity between male and female wages in the U.S. narrowed significantly—even as overall wage inequality increased. While researchers have attributed much of the development to women's growing work experience and educational attainment, most believe that waning discrimination also played a part.

In a recent study, economists Sarah E. Black of the Federal Reserve Bank of New York and Elizabeth Brainerd of Williams College throw light on the issue. Back in the 1950s, University of Chicago economist Gary S. Becker (a BUSINESS WEEK columnist) theorized that only employers in relatively uncompetitive markets can afford to practice discrimination. As markets become increasingly competitive, he wrote, such employers must either change their ways or be driven out of business by competitors unwilling to sacrifice profits by practicing discrimination. Thus, rising competition should inevitably lead to a decline in discrimination.

Since many industries in the 1990s faced intensified competition from foreign competitors, Black and Brainerd decided to apply Becker's thesis in an analysis of the impact of growing imports on gender wage gaps in two manufacturing sectors: concentrated industries controlled by relatively few companies, and competitive industries where market power was more widely dispersed. Exactly as Becker's theory implied, they found that gender wage gaps narrowed more rapidly in concentrated industries, which had formerly faced little competitive pressure to reduce discrimination.

Thus, while rising imports are often blamed for widening wage inequality by lowering the wages of low-skilled workers, they also appear to have had at least one positive effect on inequality—reducing the ability of employers to discriminate against women.

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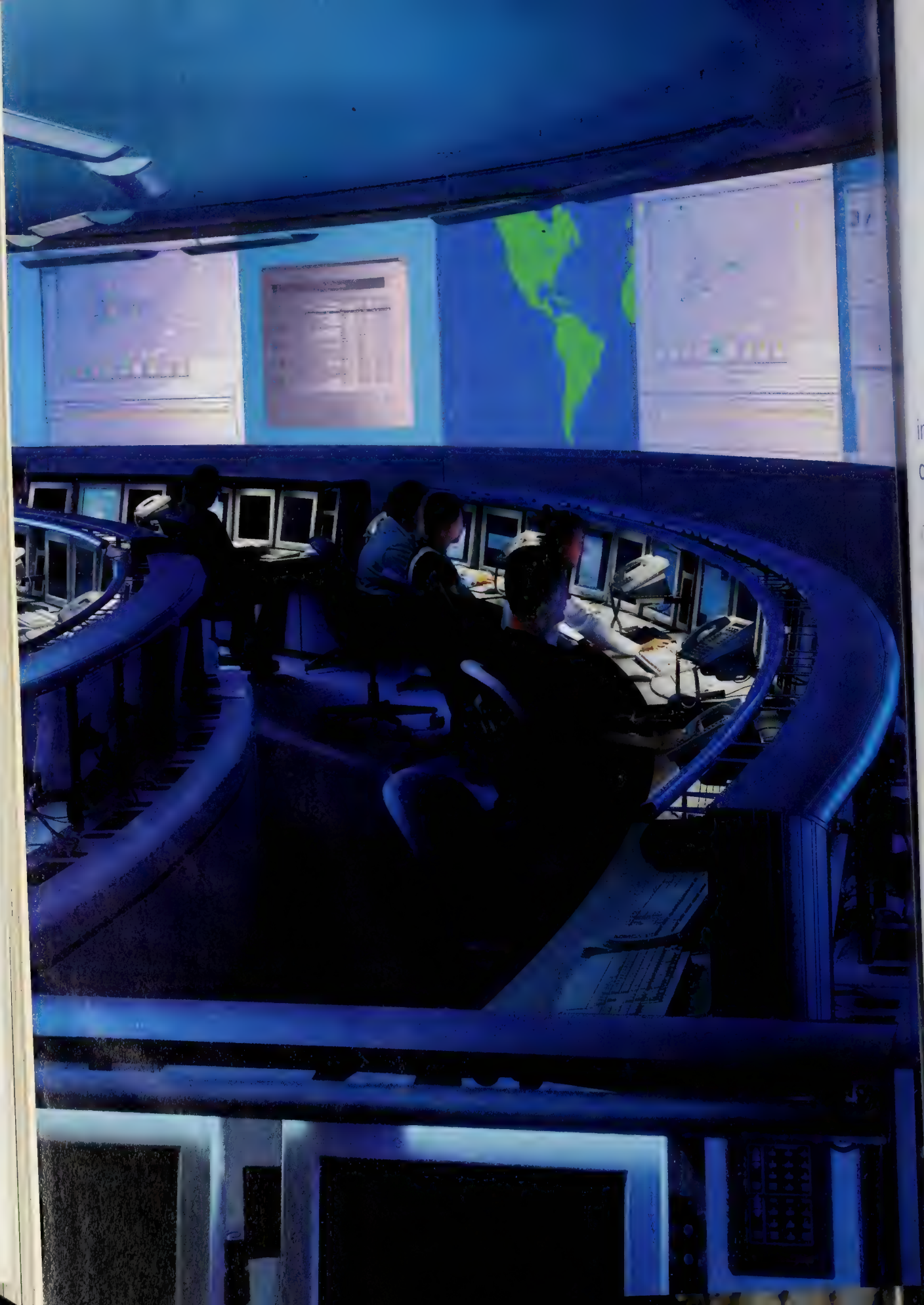
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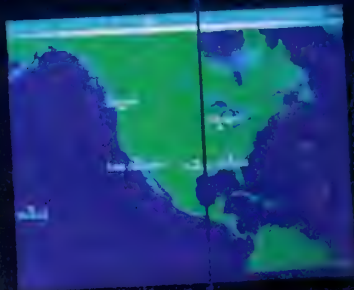


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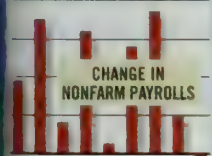
5 LABOR DEMAND WEAKENING R IS THERE A SHORTAGE OF WORKERS?

Hurricane Floyd wreaked havoc on the employment data

U.S. ECONOMY

The September employment report was a real head-basher. Nonfarm jobs fell by 8,000, but wages ticked up by a large 0.5% from August, and the jobless rate stayed at a low 4.2%. Such contradictory data made it difficult to analyze what is considered the most comprehensive and timely set of economic numbers there is.

SEPTEMBER'S JOB LOSS: SIGN OF A SLOWDOWN?



AUG 99
HOUSANDS
DATA: LABOR DEPT. BUSINESS WEEK

It's best to look at the report from three separate angles. First, the demand-side explanation would suggest that businesses are scaling back their need for labor in response to a slowdown in economic activity. That could explain why payrolls shrank for the first time in 3½ years (chart). Second, the supply-side argument would counter that,

with a record number of people already working, the weakness reflected a lack of able bodies to hire. Finally, given the effects of Hurricane Floyd and the notoriously large revisions that are typical for September data, perhaps the best handling of the report might be to toss it in the trash and hope that the October data will paint a clearer picture.

That's what a lot of economists—and maybe even the Federal Reserve policymakers—are doing. Reading the job data correctly is crucial right now, because any Fed policy decisions will be based largely on the state of the labor markets. The Fed is concerned that tight job markets could push up wage growth far above the pace of productivity to generate inflationary pressures. Policymakers would feel forced to hike interest rates again before that inflation risk flares up.

WHAT'S THE ANSWER? First of all, given what other stronger economic data are saying, the demand-side explanation that the economy is slowing down looks weak. However, there may be something to the supply-side argument. The job data may be giving the hint that the economy is bumping up against a severe shortage of workers. If so, then wage growth and attendant inflationary pressures will heat up. But more than anything, the weak numbers in the September job report simply look screwy. First of all, Hurricane Floyd wreaked havoc on the data. The Labor Dept. said that, excluding Floyd, payrolls would have

risen by 50,000. True, that's still small, but keep in mind that September is traditionally a difficult month for the government to seasonally adjust, partly because of the timing of students leaving the job markets.

According to economists at J.P. Morgan & Co., September payrolls are typically revised sharply higher. The Morgan analysts say that during the past five years, the average September payroll gain was originally reported at 121,000. But in the second revision, the average increase was refigured to 168,000. And by the time the Labor Dept.'s annual revisions were taken into account, the gain was 251,000—more than double the first estimate. That means that the September job loss could turn into a modest addition when the October report is released on Nov. 5. Plus, October jobs are likely to show a sizable rebound.

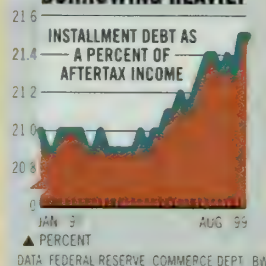
Moreover, last month's data run counter to other recent job numbers. September payrolls, even adjusted for hurricane losses, were way out of line with this year's average job increase of 192,000 per month. And unemployment insurance claims gave no clue to the job loss. September filings were not significantly higher than the August average.

Also, the labor report showed 21,000 more factory workers were laid off last month, but the purchasing managers' report and other industrial data show that factory activity is picking up. In a third-quarter survey, the National Association for Business Economics reported that 31% of the companies surveyed exported more last quarter. That was the highest percentage in two years, just before the Asian crisis unfolded.

The employment data also show that retail stores laid off 49,000 last month, though retailers said that back-to-school shopping was solid. The large \$10.8 billion gain in installment credit in August is another sign that consumers are still on a buying spree. Debt outstanding is up to a record 21.5% of aftertax income (chart).

DOES IT SEEM PLAUSIBLE that businesses are not hiring because they cannot find qualified workers? Certainly, some of the data in recent months support this supply-side view: The jobless rate is at a 29-year low. A record percentage of people are already in the labor

BUSY SHOPPERS ARE BORROWING HEAVILY



▲ PERCENT
DATA: FEDERAL RESERVE, COMMERCE DEPT. BW

Business Outlook

force, and labor-force growth has slowed. Moreover, with domestic demand still strong and foreign demand picking up, businesses should be hiring, not firing, and the workweek should be rising, not falling.

If the shortage of skilled workers is becoming severe, though, the deficiency has implications for the economy. Businesses will have to raise salaries to attract needed workers. That will not be a problem as long as higher pay is met with commensurate gains in productivity.

In its Oct. 5 policy statement, the Fed noted how productivity advances have fostered favorable trends in unit costs and prices. That trend may have continued in the third quarter as well. The total number of hours worked in the economy grew at a modest 2.2% annual rate, but economic output may well have grown about 4%, suggesting a strong productivity gain. However, keep in mind that hours worked dropped sharply in September due to Floyd, which could overstate the quarter's productivity growth.

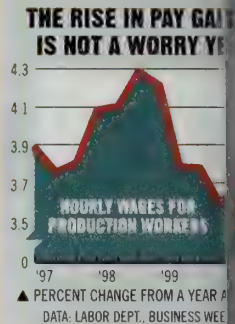
BECAUSE THE RELATIONSHIP between productivity and wage growth is so crucial to future Fed decisions, the 7¢ jump in average hourly pay in September, the largest gain in 16 years, was an eyepopper.

Like the job loss, though, the wage gain looks odd. Hourly pay usually ticks up when there is a decline in low-paying jobs and the workweek, such as tourism-related losses from the hurricane. In the third quarter, av-

erage pay was up 3.7% from a year ago. While that means household buying power is still growing, the gain is below the recent peak of 4.3% hit in mid-'98 (chart). If, however, the supply of labor is dangerously low, then yearly pay gains could soon rise above 4%, putting upward pressure on unit labor costs.

What about the argument that weaker demand is cutting hiring? Certainly, a few recent trends suggest some easing in the labor markets. For example, the number of discouraged workers is climbing again. And the quit rate—the percentage of unemployed who voluntarily left their last jobs—fell back in September, to 12.7% from a recent high of 14.5%. The potent data on consumers and manufacturing hardly suggest an economy slowing down, however. And demand may slow first before job growth does.

Unfortunately, the apparent quirks in the September jobs report make it hard to say whether weaker demand or a supply constraint is the dominant influence on the labor market now. Luckily, the Fed will receive other reports—including the October jobs number and revised September data—before it meets on Nov. 1 to set monetary policy.



BRITAIN

KEEPING A LID ON GROWTH

Bank of England Deputy Governor and inflation hawk Mervyn King had a tough sell on Oct. 11. He was in Edinburgh, Scotland, defending the Monetary Policy Committee's preemptive rate hike in September before an industrial group hit hard by the manufacturing recession. What's more, he fueled speculation that, after no October hike, the MPC will lift rates again in November.

King's remarks came as the British economy faces not only robust domestic demand but also a pick-up in foreign demand. The unemployment rate, at 4.2% in September, is already the lowest in two decades, and wage growth, which sped up to 4.9% last month, is

faster than the MPC deems consistent with its 2.5% inflation target.

Recent government revisions to gross domestic product show that the economy was stronger last winter than first thought, and

that the MPC's 2.5 percentage points in rate cuts, which took rates to a 22-year low, may have been overdone. British demand is already growing 4.5% yearly, and it's likely to accelerate thanks to past rate cuts.

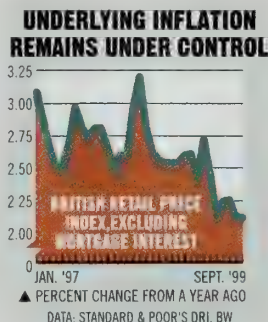
Moreover, exports are up sharply, to the

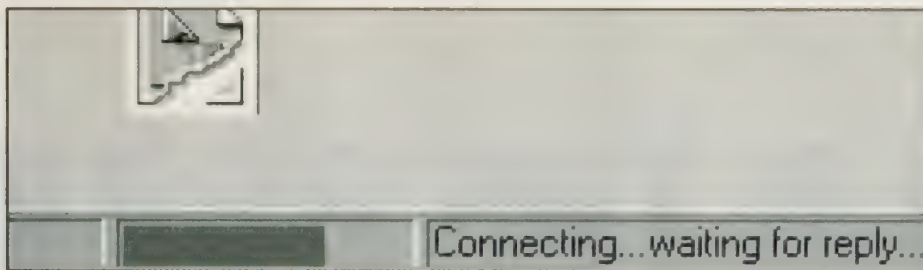
benefit of manufacturers. Excluding oil, exports in the past three months are growing at an annual rate of 18% compared with the previous three months, and shipments to non-European Union

countries are up 30%. August industrial production posted the seventh gain in a row, and the recent trend in factory output is the strongest in nearly two years.

September underlying retail inflation remained at a tame 2.1%, helped partly by price wars generated by competition from Wal-Mart Stores Inc., along with declining import prices resulting from the pound's strength this year. Still, service inflation is 3.6%. Inflation for nonenergy factory-made goods is also benign, but input prices are picking up.

New strength in sterling since the September rate hike—and its potential to throttle the factory recovery—likely stayed the MPC's hand in October. But peppier foreign demand and the need to rebuild inventories will power the factory upturn in coming months.





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HOLD THE BUBBLY

Time to relax and make some plans for the last New Year's Eve of the millennium? If you listen to Federal Reserve Chairman Alan Greenspan and many government policymakers, there's not much left to worry about: The big bad Y2K bug that can hamstring computers not programmed to deal with the date change is not exactly eradicated, but the massive repair efforts to inoculate vital segments of the economy seem to be mostly on schedule. According to a recent CAP Gemini survey, 94% of U.S. companies will have most mission-critical systems Y2K-compliant by the time the ball drops in Times Square. Even the most famous millennium alarmist on Wall Street, Edward E. Yardeni, chief economist at Deutsche Bank Securities Inc., has trimmed his apocalyptic predictions.

So go ahead and order the bubbly. But don't get complacent about Y2K. Neither the Pentagon nor the Medicare system is fully prepared. Nor are many

small and midsize American companies. And outside the U.S., the level of readiness varies from good in places such as Mexico and parts of Europe to abysmal in China, Indonesia, and most of Asia's developing economies. Disruptions in those economies could spell trouble fast for all sorts of U.S. businesses.

Back in the U.S., the very efforts to avoid disruptions are already distorting the economy. Surveys show that more than a third of manufacturers plan to hike inventories of raw materials, by 23% in the fourth quarter. At the same time, companies are curbing new investments in computer systems until after they're safely into the new year.

This has economists plugging the "Y2K effect" into their models. St. Louis-based Macroeconomic Advisers LLC says this kind of inventory buildup alone could add more than one percentage point to gross domestic product growth in the final three months of this year—

but shave gross domestic product that much or more in next year's first quarter as companies work off the excess. And, warns MA Chairman John Prakken: "There is a potential for volatile and erratic movements in inventories at the end of the year."

Meanwhile, the Y2K effect is showing up in all sorts of unpredicted places. Some advertising agencies report that major clients are cutting back on fourth quarter budgets, willing to lose business rather than create demand that they might not be able to fill.

GREAT EXCUSE. At Morgan Stanley Dean Witter, computers rank 4,000 global suppliers by color. Red means totally unprepared, amber means problematic and green means tested and reliable.

For some companies, Y2K offers a handy excuse for all sorts of things. In Hollywood, for instance, several studios are tacking another week onto the usual yearend holiday shutdown just in case Y2K cripples transportation. A

GLOBAL TROUBLE SPOTS

Power outages and other disruptions in Taiwan or China could cause supply problems in the U.S. and Europe

DATA: GARTNER GROUP INC.; U.S. SENATE Y2K COMMITTEE



FOR NOW Y2K will affect everyone, from the ready to the clueless

r week in Aspen couldn't hurt. And the truth is that until the calendar flips from 1999 to 2000 on computers everywhere, nobody really knows how Y2K fixes work. Even the most diligent Y2K bug killers could not test every line of code in all their systems. Some systems are bound to fail.

September survey by CAP Gemini America, a consulting firm, found that 82% of large U.S. companies have already experienced a Y2K-related glitch. Some companies report fixes that hold up to repeated testing. "In most of these cases, it didn't stop the systems from working, but caused a whole lot of errors," says Howard Rucka, a consultant for CAP Gemini.

Financial markets will be affected, according to John Thain, co-president of Goldman Sachs Group, simply because people expect them to be. "Volatility will be way down," he predicts. "We will see a much lower level of activity in the second half of December

and the first two weeks in January." In the bond markets, the Y2K effect can be seen in growing interest-rate spreads. The risk premium on corporate bonds has risen by 10% and 20% since July. Curt Shambaugh, head of fixed-income strategy at Credit Suisse-First Boston estimates that U.S. bond issuance will fall to \$23 billion in November from \$42 billion in November, 1998.

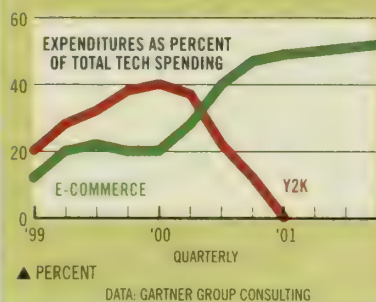
There is still raging debate about how big a threat Y2K poses in the U.S. But most economists—including Greenspan—agree that it is very unclear how prepared enterprises overseas are. According to a recent U.S. Senate Y2K Committee study, "the failure of other nations to fix their bug problems could cause global disruptions that wash up on our

shores," creating the potential for higher energy prices, supply shortages, and a mild global economic downturn. Ahmad Kamal, the U.N. outgoing Y2K chief, says he's mostly concerned about shipping. "Many shipping companies are not forthcoming or compliant, and countries remain heavily dependent on shipping for oil," Kamal says. The U.S. imports around half of the oil it consumes, much of it from Venezuela, one of the countries that Kamal fears is not ready for the New Year. Venezuela, in fact, is toward

the bottom of many analysts' rankings of Y2K preparedness in different countries.

Which countries are most at risk? Indonesia and China are among those considered most dicey. In Indonesia, two-thirds of companies have yet to finish their Y2K projects and "have paid scant attention to

AFTER Y2K, TECH MONEY WILL FLOOD INTO E-COMMERCE



contingency planning, such as the real risk of power failure," says a new report by Jardine Fleming Securities Ltd.

Japan, on the other hand, has "come a long way" in fixing its financial sector, says Lou Marcoccio, research director of the Stamford (Conn.) consulting firm Gartner Group Inc. But small- and mid-size Japanese companies are still "vastly unready." The same is true in Taiwan, where small companies comprise 98% of all companies. Add this to concerns that one of the biggest problems in Asia could be massive disruptions of power, and possible supply problems for the U.S. and Europe begin to seem much more likely.

THE GOOD NEWS. In Japan, there's also a lot of concern about the high potential for public panic. There is even talk of possible runs on the banks, which could take down financial markets. According to an Oct. 11 report in the newspaper *Asahi*, Prime Minister Keizo Obuchi could be contributing to the problem: The paper says he is expected to call on citizens to store a week's worth of food, water, and cash in preparation for Y2K. "This is a country where people cornered toilet paper when the oil shock hit and formed lines when the Long-Term Credit Bank of Japan was [pronounced] insolvent, even though it was clear that the deposits were guaranteed," says Takaaki Okada, an international liaison for Japan Securities Dealers Assn.

Back in the U.S., the Y2K bug continues to dictate how companies spend their technology dollars. Gartner figures that Y2K ate 20% to 40% of technology budgets this year and could consume 40% in 2000—because of continuing failures and interruptions, legal issues, and work by companies to complete all non-critical Y2K work.

The good news? Once Y2K issues are resolved, probably by midyear, computer makers could see a boom as spending on e-business soars. In a Gartner survey released Oct. 11, companies said that by next spring they will be spending half their tech budgets on e-commerce. A CAP Gemini survey speaks to that pent-up demand caused by the bug. Of 156 large U.S. companies surveyed, Y2K has caused 82% to delay Intranet projects and 33% to defer e-business and e-commerce projects. "The whole world is dying to dive into e-business," says Gartner analyst Marcoccio, "but it's stuck in the mire of Y2K." Soon, it may be safe to get unstuck.

By Marcia Stepanek in New York, with bureau reports

COMPUTERS

THE VISE TRAPPING PC MAKERS

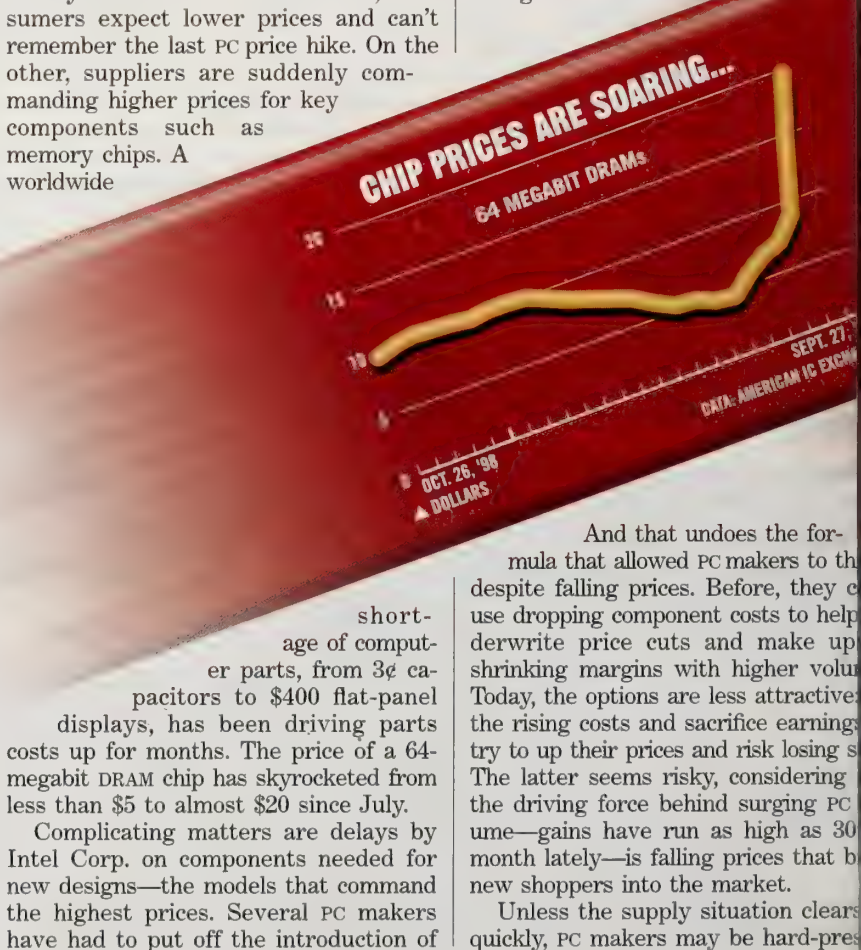
Caught between rising chip prices and stingy consumers

It was beginning to look like another blockbuster Christmas for PC makers. With slick new products, low prices, and Internet service rebates that promised "free" PCs, record sales seemed certain. Until Sept. 21. That's when Taiwan was rocked by a horrific earthquake that disrupted America's big PC makers and other electronics firms from vital sources of supply. "This was going to be a huge Christmas, but suddenly there's a wet blanket on things," says Merrill Lynch analyst Steven Fortuna.

The disruptions in supply lines helped to tighten the vise in which the PC industry finds itself. On one side, consumers expect lower prices and can't remember the last PC price hike. On the other, suppliers are suddenly commanding higher prices for key components such as memory chips. A worldwide

PCs for the Christmas season as a result. Intel itself reported disappointing earnings for the third quarter, citing, among other factors, more sales of cheap chips than it had anticipated. On Oct. 1, the chip giant's earnings report sent its stock tumbling by 10% and helped pull down the rest of the market.

Now, with the Taiwan disaster tying up supplies, PC makers are scrambling to secure the motherboards, chipsets, and other parts they need to meet demand—even if it means paying a lot more to get them.



And that undoes the formula that allowed PC makers to thrive despite falling prices. Before, they could use dropping component costs to help underwrite price cuts and make up shrinking margins with higher volume. Today, the options are less attractive: the rising costs and sacrifice earnings by trying to up their prices and risk losing sales. The latter seems risky, considering the driving force behind surging PC volume—gains have run as high as 30% a month lately—is falling prices that bring new shoppers into the market.

Unless the supply situation clears up quickly, PC makers may be hard-pressed

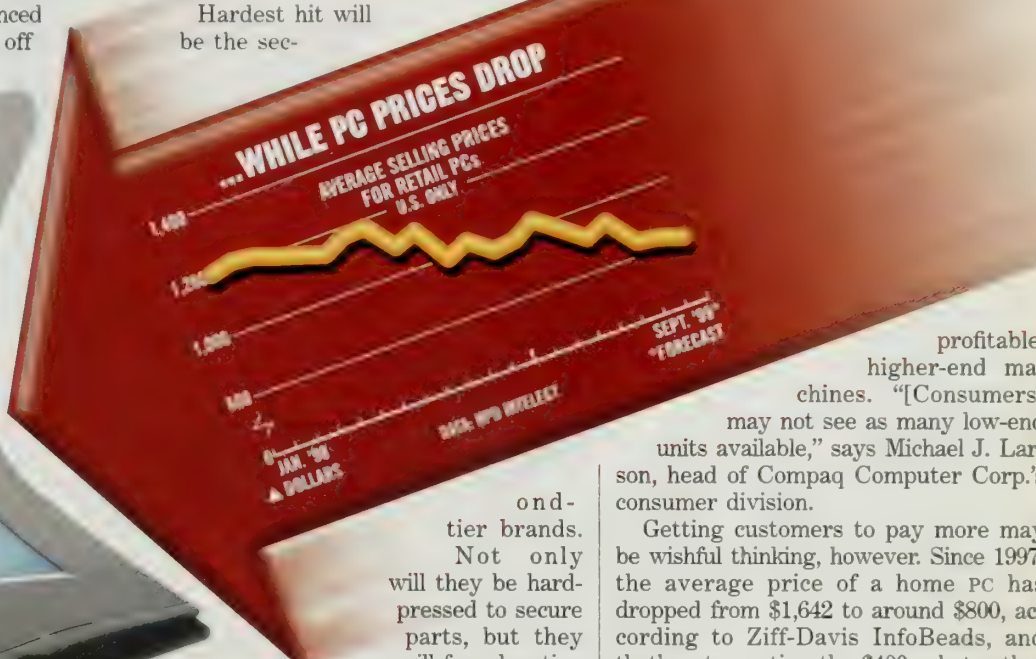
rank out enough computers to meet demand, no matter what the price. Electronics are already in short supply, the earthquake could choke off supplies of graphics chips. Danny K. Lam, a semiconductor analyst with market researcher Fisher-Holstein Inc. figures prices will be 5% to 20% below fourth-quarter levels. "And you can't build a PC without a graphics chip," he notes. Already, Hewlett-Packard Co. has noted that its sales growth will be checked, coming in at 7% to 10%, not 10% to 13% for the quarter ending Oct. 8. On Oct. 8, IBM, which lost \$1 billion on PCs last year, announced it is to cut costs by laying off 10% of the workers in its consumer PC unit. And

Dell Computer Corp., by virtue of its size, might minimize the damage: Few suppliers will risk losing its business to take advantage of what may be short-term pricing power, say analysts.

Apple and Gateway may not fare so well. Apple's decision to double the memory in its new iMacs, to 64 megabytes, could cost the company \$50 million in the fourth quarter, say analysts—equal to 20% of anticipated profits. "If you're Dell, it's no big deal. If you're Apple, it's a big problem," says Brown Brothers Harriman & Co. analyst William J. Milton Jr.

Hardest hit will be the sec-

Still, relief isn't likely to come by Christmas. To ease the pressure, some top players are contemplating something unheard of in PCs for most of the '90s: price increases. Already, Dell has raised prices in Japan on its Dimension J model, from \$870 two weeks ago to \$1,000. And if significant parts shortages crop up, these companies hint they'll build more



Oct. 13, Apple Computer Inc. reported earnings of just \$90 million after one-time gains—25% below what analysts has been predicting before the company warned on Sept. 20 that a shortage of key chips would slow sales. The situation, if it persists, could dull the luster of Wall St. darlings such as Dell, Gateway, and Apple. All have been rewarded by investors for their streamlined, just-in-time manufacturing setups, which enable them to quickly benefit from falling parts prices. But with few parts in inventory, they're more exposed to rising prices and shortages.

margin pressures. Companies such as emachines earn just \$40 or so on their cheaper models—just a few dollars more than the rise in the price of memory since July. "The rise in memory prices alone marks the difference between making money and not making money," says Andrew Watson, president of PC maker Monorail Computer Corp.

There is good news. For starters, demand shows no sign of abating. "Our PC customers continue to be bullish," says Guerrino De Luca, CEO of mouse-maker Logitech Inc. And what's more, few believe parts prices will remain high for long. Continued price drops on some parts, such as disk drives, continue apace. And many analysts think the high memory prices may be short-lived. As long-suffering Asian chipmakers ramp up capacity to profit from the higher prices, "I'm guessing spot prices could fall back to \$6 by November," from \$18 today, says Dataquest analyst James Handy.

profitable, higher-end machines. "[Consumers] may not see as many low-end units available," says Michael J. Larson, head of Compaq Computer Corp.'s consumer division.

Getting customers to pay more may be wishful thinking, however. Since 1997, the average price of a home PC has dropped from \$1,642 to around \$800, according to Ziff-Davis InfoBeads, and that's not counting the \$400 rebates that Internet Service Providers such as America Online Inc. are offering to customers who sign up for three-year contracts. So if PC makers stuff shelves with fancy models with who-cares features, sales could suffer even more. "Consumers may not have a very wide range of models to choose from this Christmas, and I think unit sales will drop dramatically as a result," says analyst Allison Boswell.

That's a worst-case scenario, to be sure. But having trained customers to expect perpetual price drops, PC makers may have little wiggle room. Ask Julio Meran, 43, a tax accountant in Lawrence, Mass. He recently put off buying a high-end machine in favor of an emachines model that cost \$199 after a rebate. That's not to say he doesn't want a screamer, but he'll only buy one if the price falls by a few hundred bucks. For PC makers, making that happen is looking tougher all the time.

By Peter Burrows in San Mateo, Calif., with bureau reports

COMMENTARY

By Howard Gleckman

THE NASTY SIDE EFFECTS OF MEDICAL SAVINGS ACCOUNTS

To hear boosters talk, Medical Savings Accounts are the millennial version of penicillin—a market-based elixir that will help 44 million uninsured Americans get health coverage through a combination of limited insurance and individual savings accounts. At least that's what Republicans and even some Democrats said when the House passed legislation on Oct. 6 to extend MSAs to everyone.

For Americans who are healthy and with disposable income, MSAs are indeed a great deal. They combine low-premium catastrophic health insurance with a sweet tax break that softens the blow of having to pick up medical expenses until they hit deductibles that can run as high as \$4,500 for a family and up to \$2,250 for an individual.

But the plans have at least three major drawbacks. First, there is little real evidence that MSAs will greatly expand coverage to the uninsured. Next, because MSA enrollees pick up routine expenses, the program fights one of the major themes in other cost-containment efforts: encouraging preventive care to head off expensive illnesses. And finally, if MSAs siphon off the healthiest workers, traditional plans will be left with a costly population of sicker customers and more children. Premiums would likely soar.

Here's how MSAs work: In place of a conventional policy, an employer buys a high-deductible MSA plan that not only cuts premiums 30% to 50% below traditional plans but usually allows participants to choose their own doctors. Workers then contribute up to 75% of their plan's deductible to a tax-deferred account, similar to an Individual Retirement Account, and tap that for all out-of-pocket medical expenses, up to the deductible. Whatever funds they don't spend, they keep in their accounts, where they earn tax-free returns. At 65, the MSA balance can be withdrawn as regular



income for any purpose.

Congress created MSAs two years ago as a limited experiment available only to the self-employed and those working for small businesses. There have been relatively few takers. Of the 42,000 who signed up for MSAs in 1998, roughly 10,000—or 22%—had no prior coverage, says the Internal Revenue Service. Looking to the future, researchers at Rand Corp. estimate that if all small businesses were to offer the plans, coverage of their employees could be expected to rise by only an insignificant 2 percentage points from its current 54%.

That's not much of a payoff, com-

LOOK OUT They won't expand coverage of the uninsured, they discourage preventive care, and premiums for everyone else will soar

pared with the dramatic effect that MSAs would have on the kind of insurance workers get. There would be a "mass exodus" from other plans, particularly the expensive fee-for-service plans, says Rand Senior Economist Dana P. Goldman, an author of the study. Why? Because premiums for MSA plan would be so much lower. That has been the experience of Allen Wishner, CEO of Flexible Benefit Service Corp., an MSA provider in Des Plaines, Ill. He says that while most individual buyers of MSAs had no prior coverage, 90% of his group customers did.

What will happen if lot of healthy folks do join MSAs? Len M. Nichols, a health-care expert at the Urban

ban Institute, a Washington-based think tank, estimates that if 25% of workers pick MSAs, premiums for those who stay in traditional plans would rise by as much as 60%.

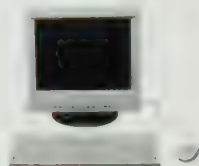
NO RUSH. And what about preventive care? Today, barely 7% of managed-care patients see primary-care doctors for routine exams, even when visits are free or require a small copayment. So it is unlikely that more patients will go if they have to pay full fare.

Right now, there is no need to tinker with MSAs. The Clinton Administration is dead-set against extending them and has threatened to veto the House bill if it passes the Senate. But the debate is important. MSAs may become a useful option for small businesses being squeezed out of the managed-care market by rising premiums. The original MSA experiment, aimed at these businesses, was supposed to run for another couple of years. Why not wait and see how it works before adding \$400 million to the \$100 billion in tax subsidies Americans already provide for health-insurance costs?

Gleckman covers health-care policy for BUSINESS WEEK in Washington.



Yes.



Yes.



Yes.



Nope.

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DEALS

HUGHES: FREE AT LAST?

GM may be ready to spin off its fast-growing satellite unit

Shareholders of General Motors Corp. have for some time harbored a not-so-secret wish: They covet the value that they figure can be theirs if the auto giant spins off Hughes Electronics Corp., the world's top satellite outfit. For just as long, GM has resisted.

But now, it looks like shareholders may get their wish. Since Labor Day, Hughes's managers, including Chairman and Chief Executive Michael T. Smith, have been dropping hints that the car company run by his brother, Jack, might spin off most of its 69% stake in Hughes over the next six to 18 months. That prompted GM Vice-Chairman Harry J. Pearce on Oct. 6 to issue a carefully worded statement assuring analysts that GM wasn't ruling out a Hughes spin-off, but wasn't planning one now.

IN THE TIMING. Before GM can consider a Hughes spin-off, Pearce said, Hughes must clarify its own strategy. Hughes execs will get their chance to do so on Dec. 6, when they make their annual presentation to GM's board. "The separation of Hughes from GM is a matter of when, not if," says John A. Casesa, an auto analyst at Merrill Lynch & Co.

Shareholders began to lobby hard for a spin-off last spring when GM unveiled plans to pump \$500 million into Hughes for expansion. "They got out their pens and started writing to management and directors," says J.P. Morgan analyst David Bradley. GM withdrew the plan after America Online Inc. agreed to kick in a \$1.5 billion strategic investment. But by then, investors were pressing GM to cut the apron strings altogether.

A spin-off would unlock

tremendous value at Hughes. As a tracking stock, GM's H shares have not commanded the same valuation as pure plays in the satellite business. More important, independence from GM could pave the way for Hughes to be more aggressive in developing its DirecTV unit. It might even do its own spin-off of DirecTV shares to generate more value and capital. GM, meanwhile, could use the approximately \$18 billion its Hughes stake would fetch to help meet unfunded health-care obligations that total \$41 billion.

How would the deal add up? Casesa figures that Hughes accounts for \$29 of GM's current \$66 share price. That would leave GM worth about \$37 a share without Hughes. Because Hughes earnings account for just 2% of GM profits, the effect on GM's price-earnings ratio would be

quite lopsided: At 37, GM shares would trade at a puny 4.5 times expected 1999 earnings, compared with Ford Motor Co.'s multiple of 9. And while most analysts believe GM isn't as well run as Ford, they say the auto giant's stock ought to rise to a multiple of 7 or 8 times earnings.

And if it didn't? With a slimmer market capitalization of about \$24 billion, GM "would be a takeover target, and that would be fabulous," says GM investor Seth M. Glickenhau of Glickenhau & Co.

GM is still coy about when and how it might spin off Hughes. One scenario: The company might hold on to a third of its Hughes stake, while contributing a third to health-care liabilities and the remainder to owners of GM common. That way, GM could retain a piece of Hughes's future earnings and keep a pipeline to Hughes technology that could enhance GM cars. But Wall Streeters would regard such a strategy as an interim measure. Before too long, investors would be clamoring for the rest of Hughes. And GM execs would have one last bone to toss out to placate their perennially restless stockholders.

By Steven V. Brull in Los Angeles and Kathleen Kerwin in Detroit



INFO-GURU: CEO Thoman

STRATEGIES

WHY XEROX IS STRUGGLING

Sales turmoil mars its turn toward digital technology

Xerox Corp. President and Chief Executive G. Richard Thoman is a picture guy. For the past two years he has preached a digital revolution to the copier giant. Get down to the nitty-gritty, though, and it's clear that the revolution isn't going as planned: In the third quarter, copiers and printers, Xerox is losing ground. On Oct. 18, the company is expected to announce flat revenues for the third quarter and a drop of up to 12% in earnings per share compared with the same period last year, to about 47¢. The early warning sent Xerox shares, already well off their recent high of 60 in July, tumbling 24%, to 32½ on Oct. 8.

Xerox blamed the bad news on short-term surprises: sagging productivity, the sales force after a big reorganization as well as weakness in Brazil. But the sheer scope of bad news shocked even Thoman, who told investors in a conference call that he was "disappointed and sad about this quarter."

For now, Thoman, who took the job in April and vowed annual earnings growth in the "mid to high teens," taints analysts' confidence. Even Thoman, who told clients to dump the stock, says he's moving in the right direction.

But getting there is proving tough.

GENERAL MOTORS

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than anticipated. In the third quarter, while Xerox was revamping its 14,000-strong sales force to work with particular types of businesses, rather than sell machines to clients in a set territory, rivals like Canon Inc. swamped the market with innovative printers and copiers and gained ground on the Xerox team.

Few doubt the need for a radical overhaul in Xerox's sales organization. It is fundamental to Thoman's strategy of making digital copiers and printers part of corporate networks to have a sales force that can consult with a company about its "document needs."

But the transition has been more disruptive than even Thoman imagined. Xerox salespeople are being taken off the streets for up to two weeks at a time—to be trained to forget much of what they used to do. "They're trying to change the way they've been selling for generations, going from boxes to solutions, from geography to industries," says David A. Nadler, chairman of Delta Consulting Group.

And, instead of calling on their old contacts in reprographics or purchasing, Xerox salespeople now have to cultivate new customers in the info-tech department. "Rick has a clear vision, but the salespeople are still commissioned on selling a box," says Bob Sostilio, group service director for CAP Ventures Inc., which tracks industry trends.

Critics wonder if Thoman took his eye off copiers because he's so focused on Hewlett-Packard Co., which leads the office printing market. The explosion of desktop printers in offices has hurt demand for stand-alone copiers, and Xerox wants a share of the former market. Thoman isn't speaking to the press prior to the earnings announcement, but he has previously argued that he sees HP as his main competition.

Thoman's biggest problem may be his success in selling a vision to the public and Wall Street that Xerox may not be able to achieve just yet. A massive ad campaign has put across the idea that Xerox is not just a copier company, but a high-tech powerhouse; and, until lately, investors seemed convinced that Xerox was again on the leading edge. The sudden implosion has left analysts, such as James Corridore of Standard & Poor's Equity Group, confused. "They could have explained it more," he says. Thoman has once more reassured investors in an Oct. 8 conference call: "Even in this difficult quarter, we remain absolutely convinced that our strategy is right." Now, his troops need to walk the walk.

By Diane Brady in Greenwich, Conn.



ECONOMICS

WHY MUNDELL WON THE NOBEL

For work that led to the euro, not for his supply-side theory

The core of the Reagan Revolution of the 1980s was the idea that cutting taxes would stimulate the economy by restoring people's incentives to work and invest. Big tax cuts, President Reagan argued, would actually increase government revenues in the long run. Reagan learned his supply-side economics from the likes of Jack Kemp, Jude Wanniski, and Arthur B. Laffer. They, in turn, took their inspiration from a Canadian-born economist at Columbia University named Robert A. Mundell.

Naturally, supply-siders were ecstatic on Oct. 13 when Mundell was named the winner of the 1999 Nobel prize in economics. Exulted Wanniski, head of Polyconomics Inc. in Morristown, N.J.: "Mundell is the most important economist of our time." Laffer said Mundell's prize is "absolutely the most deserved prize I've ever seen in my life" and called Mundell "the best economist in the world today."

But it's wrong to conclude that Mundell's prize constitutes an endorsement of supply-side economics by the Royal Swedish Academy of Sciences. The phrase doesn't even appear in its award announcement. Instead, the acad-

MUNDELL

The euro "may be the most important development ...since the dollar replaced the pound sterling"

emy cites Mundell for his theoretical work in the 1960s on monetary and policy in economies.

What's more, though Mundell fervently believed in tax cuts, he isn't

doctrinaire about supply-side theory, as his own followers are. For instance, Mundell believes that tight monetary policy triggered the Depression—a demand-side explanation that's anathema to supply-siders. Says Wanniski: "I often accuse him of being not as 'Mundellian' as I am." Massachusetts Institute of Technology economist Rudiger W. Dornbusch, who studied under Mundell, says it's typical of his former professor to "plant bombs and move on."

Whatever his role in setting off the Reagan Revolution, Mundell's contribution to economic theory has been significant. In the 1960s, he originated the concept of the "optimal currency area," which framed the debate that led a year to the creation of a single currency, the euro, for Western Europe. Mundell defined an optimal currency area, a region should use a single currency only if the economies in it are alike enough that a single currency, hence a single monetary policy, would work for all. He wrote this year the euro "may be the most important development in the international monetary system since the dollar replaced the pound sterling as the dominant international currency soon after the break of World War I."

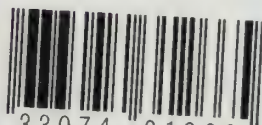
PREVIEW. Being Canadian influenced Mundell's work. Canada floated its currency in the 1960s while other nations were still pegged to the gold standard, so he got a preview of what would happen after the Bretton Woods agreement broke down in 1973. He demonstrated that with a floating currency and free capital flows, fiscal policy can't affect overall demand because changes in government spending trigger changes in interest rates, exchange rates, and trade flows that are exactly offsetting. Says Paul A. Samuelson, who taught Mundell at MIT: "He brought [a focus on] money back into international trade."

With fiscal conservatism taking precedence over tax cuts in Washington these days, it's easy to see why supply-siders are gleeful over Stockholm's seeming recognition of one of their own. Supply-side economics is not what earned Mundell his Nobel.

By Peter Coy in New York

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COMMENTARY

By Rich Miller

THE FED'S DANGEROUS LIAISON WITH WALL STREET

Federal Reserve Chairman Alan Greenspan was just a rookie on the job a dozen years ago when he was confronted with his first crucial challenge: a stock market collapse on Oct. 19, 1987, that wiped 22.6% off the Dow Jones industrial average. Greenspan, who had joined the Fed two months earlier, responded exactly how the economic textbooks said he should. He flooded the banking system with money and drove down interest rates. Stock prices recovered and an economic downturn was postponed.

Now, the veteran central banker would like to execute a far more delicate maneuver in his ongoing dance with Wall Street. He wants to lead stock prices into a gentle landing before the supercharged market overheats the economy and stokes up inflation. But his ability to pull off that tricky step is hampered by the convoluted relationship that has grown up between the Fed and the stock market over the past 12 years. Each participant in this dance pays exceedingly close attention to what the other is doing—perhaps to the detriment of both.

SCARY SHADOWS. The Fed worries that stock prices are climbing too high but resists strong-arming its partner for fear that the market will overreact. "The Fed is too wrapped up in what the markets think," gripes David S. Gilmore, a partner at currency consultants Foreign Exchange Analytics. "It's as if they're making policy on the basis of CNBC broadcasts."

The market, meantime, plays the role of the insecure ingenue. At bottom, it knows the Fed will provide a strong shoulder to lean on in a downdraft. Still, there are scary shadows in the economy, so the market hangs on the central bank's every word for reassurance and reacts violently when it feels that approval is with-

held and interest rates head higher.

This dance could become downright dangerous if the Fed becomes paralyzed by fears of hurting the stock market and holds off from hiking rates—even when tightening is needed to keep inflation in check and the economic engine in balance. Also, investors are in danger of becoming too confident that the Fed will bail them out in case of a crash—so they can proceed to bid up prices to unrealistically high levels. Economists call such a development moral hazard. In-

vestors take on more risk than they believe is reasonable because they're convinced they won't have to face all the consequences.

Some Wall Street experts, pointing to today's lofty price-earnings ratios, fear that this is already happening. "There's an expectation in the market that any time that stock prices decline significantly, the Fed will ease monetary policy and reverse the decline," says veteran Wall Street analyst Henry Kaufman.

In a way, Greenspan is a victim of his own success. His ability to rescue the market in 1987 and again last fall—when the Fed cut rates three times in rapid succession and helped arrange the bailout of hedge fund Long-Term Capital Management—has given him godlike status. Investors

twitch at his every comment. But playing God is a hard role to sustain, especially when you're really not infallible.

That's why the Fed is reviewing how best to communicate its leaning on interest rates to the markets. Greenspan has even created a panel to study the question after it became clear in recent weeks that its present method just wasn't working.

Former Fed Vice-Chair Alice M. Rivlin says investors are always trying to second-guess the central bank. "People have the notion that the Fed has a clear idea of what it's going to do next, and it just isn't telling," says Rivlin, now at the Brookings Institution, a Washington-based think tank. "That's simply not true." But then again, Greenspan is also trying to anticipate the markets.

Maybe the answer is that both sides should stop obsessing about each other. They—and the U.S. economy—may be the better for it.

Miller covers the Fed in Washington for BUSINESS WEEK.



The market plays the insecure ingenue—it knows it has a shoulder to lean on in the event of a downdraft

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BROADCASTING

HDTV: YOU'RE NOT GOING TO LIKE THIS PICTURE

Technical snafus continue to slow its growth

Last March, engineers from Sinclair Broadcasting Group Inc. had their worst suspicions about high-definition television confirmed. The crew was field-testing the latest digital-TV equipment at homes and offices in a 20-mile radius of a broadcast antenna in Philadelphia. "In nine out of nine locations, we got no reception—just the blue screen of death," says Nat Ostroff, Sinclair's vice-president for new technology.

It was another bad omen on a road that is already strewn with danger signs and digital debris. Nov. 1 marks the first anniversary of digital HDTV broadcasts in the U.S. But despite millions of dollars lavished on equipment, programming, and promotions, progress is agonizingly slow. While TV stations have exceeded their targets for starting digital programming in 30 major markets, most other elements of this meandering high-tech march into the future are in utter disarray.

NEW BRAWL. To wit: Televisions that can display movie-quality HDTV images have landed in fewer than 50,000 U.S. homes since they went on the market 14 months ago. Only 30 out of 1,600 TV stations have arranged to get their signals carried over cable, the means by which two-thirds of American households receive broadcasts. For the wealthy few who plunked down \$5,000 or more for an "HDTV-ready" set, there isn't much to watch—partly because copyright protection for digital video is still up in the air. "This is going to be a long, slow transition," sighs International Data Corp. analyst R. Kevin Hause.

To top it off, an ugly scuffle has broken out since Sinclair discovered during its tests that a digital broadcasting scheme favored by Europe and Asia outperforms America's chosen approach. Sinclair and a few hundred other TV stations are now petitioning the Federal Communications Commission to give broadcasters a choice on which

scheme they adopt.

But that would require modifying key technical standards that were set nearly three years ago—a move that TV makers strenuously oppose. "Once you start changing standards, every other group with a technical gripe will come in and request another change," says Michael D. Petricone, director of technology policy at the Consumer Electronics Manufacturers Assn. (CEMA) in Washington. "It's a recipe for massive confusion and delays."

The FCC says both transmission schemes have merits. But it concedes that the U.S. digital standard isn't perfect. Where the terrain is hilly and antenna height is restricted—in Seattle and Washington, for example—as many as two-thirds of all homes may not be able to get a signal using indoor antennas, according to one recent FCC report. Sinclair insists that Europe's transmissions are more robust, which may explain how Britain's digital terrestrial service, ondigital, managed to sign up 411,000 subscribers during the past 11 months.

The FCC is still studying field-test results and could take weeks to respond to Sinclair's petition. And there are other HD-related priorities. For example, the commission must quickly decide whether and how to force cable com-



SCUFFLE

Broadcasters and TV makers are at odds over standards

panies to carry broadcasters' digital signals in homes that currently rely on analog. "The FCC has to adopt a strict pro-consumer, 'must-carry' rule for digital broadcasting. With hefty financial support from consumer-electronics companies, CBS is airing its prime-time lineup in high-definition. NBC has an HD version of *The Tonight Show* in 16 markets. And starting next year, it will introduce three hours of interactive programming on Saturday mornings, including data beamed to PCs with special digital-TV cards.

STRAINED OPTIMISM. Publicly, the major networks are trying to rise above the messy squabbles and get on with the digital broadcasting. With hefty financial support from consumer-electronics companies, CBS is airing its prime-time lineup in high-definition. NBC has an HD version of *The Tonight Show* in 16 markets. And starting next year, it will introduce three hours of interactive programming on Saturday mornings, including data beamed to PCs with special digital-TV cards.

With strained optimism, TV set manufacturers claim HDTV's hardware glitches have been exaggerated. "We're

hearing about sets being returned because of poor reception," says CEMA's Petricone. If the FCC fails to force a "must-carry," Sinclair's petition sets off a battle between set manufacturers and the drawing board. Then high-definition could be a new detour for slow start.

By Neil Gross, Richard Siklos, in New York and Heidi Dreyer in London

WHAT'S HOLDING UP HIGH-DEFINITION TELEVISION?

A year after its debut, HDTV is still struggling to overcome:

LOW PENETRATION Manufacturers have sold fewer than 50,000 TV sets that can receive the new digital signals

LIMITED RECEPTION Over-the-air receivers don't work in all locations, and cable isn't obliged to carry the signals

SCARCE CONTENT Film studios are holding back on some high-definition programming until copyright issues are resolved

CONTROVERSY Broadcasters' requests to the FCC to change digital transmission standards could force TV makers to redesign their sets

'I wanted the best protection available and APC delivered.'

— Fred Lugano, weatherization.com, Vermont

Million computer users can't be wrong about APC power protection

Personal computer users across the country recognize APC as a leader in power protection. Now, home users are finding multiple uses for APC products. Some use their APC to run a television or small refrigerator during a disaster. Others will use their APC Uninterruptible Power Supply (UPS) as a "power generator" to give them enough time to get their power generator started. Still others will use APC to protect sophisticated audio and visual equipment from damaging electrical surges.

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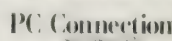
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COMMENTARY

By Catherine Yang

IS THE FCC CHIEF ALL TALK?

During his two years as Federal Communications Commission Chairman, William E. Kennard has presided over a wave of mega-mergers that is transforming the phone, cable, and broadcast industries. WorldCom's linkup with MCI, AT&T's acquisition of Tele-Communications, SBC Communications' merger with Ameritech—all got the nod from Kennard. And he is expected to do the same for AT&T and MediaOne, Viacom and CBS, and MCI WorldCom and Sprint. It's Honeymoon in Vegas, FCC-style.

From the start, Kennard has been up-front about his approach to promoting competition, his mandate under the 1996 Telecommuni-

cations Act. At the goading of a Republican Congress, he has followed a simple formula: push for deregulation and let the invisible hand—and advancing technology—sort it out.

But the unanticipated emergence of combines such as SBC, AT&T, and the aborning WorldCom-Sprint make that approach inadequate. With these behemoths around, there's less chance for upstarts to get a footing.

TOUGH TALK. When SBC Communications Inc. and Ameritech Corp. announced their nuptial plans, Kennard initially came on strong. "Is this merger going to create competition," he asked, "or will it be a nonaggression pact?" And when the FCC approved the deal on Oct. 6, it imposed conditions: The new company must compete against other Bells by promising to enter 30 local phone markets outside its region in 30 months, and it must open its own market to new entrants. The commission threatened to levy \$2.2 billion in penalties if the company can't meet the requirements.

Even as would-be competitors in local calling struggle for access to the Bell networks to reach their customers, the FCC sanctions the creation of an \$82 billion monolith that will stretch across one-third of the U. S.

That will make it harder, not easier, for the upstarts. "The FCC should have required some of its conditions before, not after, the merger," says John Windhausen Jr., president of the Association for Local Telecommunications Services, a group of Bell rivals.

That's not the only time Kennard has talked tough then failed to follow through. In 1997, he criticized soaring cable rates. But when the Telecom Act ended federal cable rate regula-

tion the next year, he opted not to ask Congress for an extension. Instead, he said, he wanted direct-broadcast satellite operators to help keep cable rates in check—a tidy market-driven solution. But the tiny DBS industry has had little effect on cable rates.

Likewise, Kennard fretted openly that AT&T's purchase of cable giant TCI might be anticompetitive. On the plus side, he reasoned that if AT&T would use TCI's cable pipes to offer local phone service and high-speed Internet access, the Bells would have to match its offerings. But he has become concerned about how AT&T might stifle Internet competition on cable by favoring its own Excite@Home service. Yet beyond a few public comments and an amicus brief in Portland, Ore., where the city is trying to force "open access" to cable, Kennard has done nothing—hoping that AT&T and the ISPs would settle the dispute themselves.

The tilt toward gigantism is consistent. This summer, at the behest of Congress, the agency watered down the rule prohibiting TV broadcasters from owning more than one station in a market. On Oct. 8, it tweaked cable own-

ership rules—saying no cable operator could own more than 30% of the pay-TV market. But it left a loophole in how companies count partial holdings, which helps AT&T's pending deal to buy MediaOne.

To Kennard's credit, he has stood his ground against letting the Bells into long distance until they prove they've opened up their own local markets to competition. Bell Atlantic's pending application to enter long distance will be a big test for him.

He should stick to his guns: If the company can't show that it has let competition flourish, it can wait. And, while it's too late to reverse the giant mergers that have taken place, Kennard still has time to burnish his record as a pro-competitive FCC chairman by making sure he puts his clout where his mouth is. An industry dominated by a few all-powerful giants is not what the U. S. needs to guarantee the benefits of competition.

Yang covers telecom issues from Washington.



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EDITED BY MARK FRANKEL

CLINTON'S NEW WORLD (TRADE) VIEW

PRESIDENT CLINTON OUTLINED his agenda on Oct. 13 for Word Trade Organization talks that are set to begin in Seattle on Nov. 30. In addition to perennial concerns such as reducing tariffs and ending export subsidies, the Administration is retooling its strategy to emphasize New Economy issues such as biotech and e-commerce.

The primary goal: to open up markets for such goods and services—which the U.S. happens to dominate. Clinton will ask the WTO, for example, to adopt market-access rules based on “sound science.” That would strike down the barriers being erected in Eu-

rope and elsewhere against biotech-enhanced agricultural products. And the White House is demanding that WTO members take no action to inhibit the growth of e-commerce, including a continued moratorium on customs duties on electronic transmissions. The President will also propose environmental-impact reviews of future trade agreements.

COLT BACKS AWAY FROM HANDGUNS

HAS COLT BECOME GUN-SHY? The West Hartford gunmaker announced on Oct. 11 that it is dropping most of its consumer handguns. The 144-year-old firearms maker said it will eliminate unprofitable models as “part of the normal, ongoing management of the business.” But Colt’s Manufacturing Vice-President Thomas Kilby had previously sent a letter to distributors saying the decision was prompted by the slew of lawsuits being filed by municipalities against gunmakers. “We have had to face the harsh reality of the significant impact which our litigation defense costs are having on our ability to operate competitively,” he wrote.

CON ED MAY NAB A NEW ENGLANDER

NORTHEAST UTILITIES, NEW England’s biggest electric utility—and one of the nation’s worst performing—is merging with Consolidated Edison of New York. Con Ed announced on Oct. 13 that it will buy the Berlin (Conn.) company for \$3.3 billion and \$4.2 billion in assumed debt. Northeast ran into trouble in 1996 when its nuclear power plants were shut down with various maintenance and safety problems. Until recently, its stock was trading at just half its 1993 high. Buying

HEADLINER: GIANCARLO PARRETTI

SUSPECT APPREHENDED. FADE OUT

Giancarlo Parretti might be ready for his close-up in court. On Oct. 11, Italian police nabbed Parretti, the onetime waiter who became one of Hollywood’s most flamboyant personalities following his 1990 takeover of Metro-Goldwyn-Mayer, in the village of Orvieto, where the ex-mogul had been living.

Parretti, whose rise in the entertainment biz had more to do with his ties to Italian and French politicians than box-office acumen, was brought in on a U.S. extradition request. He had been convicted by

a Delaware court in 1997 of perjury and evidence-tampering in a case growing out of his legal battle against Crédit Lyonnais, which provided most of the financing for his MGM buyout. He has also been convicted by French authorities of defrauding the bank.

Meanwhile, back in Hollywood, MGM announced a quarterly profit for the first time in three years. Seven months ago, the studio wrote *finis* to the Parretti era when it bought back video and DVD rights to films that Parretti had sold to Warner Brothers. *By John Rossant in Paris*



CLOSING BELL

SURF CITY

Phone.com is ringing off the hook. On Oct. 11, shares of the Redwood City (Calif.) company, which has created software to allow cell-phone users to surf the Net, jumped 14%, to 205, on news that it would acquire British software maker Apion. The next day, it jumped an additional 7% after Oracle said it would support Phone.com’s Wireless Application Protocol (WAP) browser technology. Shares of Phone.com have jumped twelvefold since its June IPO. It closed on Oct. 13 at 218%.



Northeast will give Con Ed a network reaching to New Hampshire. Other bids may yet emerge: Analysts say Britain’s National Grid Group is interested.

A QUEASY FEELING AT PFIZER

THE NEWS ON THE PFIZER antibiotic Trovan just gets worse. On Oct. 12, a Los Angeles jury ordered Pfizer to pay \$143 million for infringing on the trademark of Trovan, a British maker of electronic-identification devices. The setback comes in the wake of a June decision by the Food & Drug Administration to severely limit use of the drug after a number of patients developed liver problems. While Pfizer will challenge the verdict, James Rosini, a partner at Kenyon & Kenyon, says: “There’s a chance this award will be upheld.”

PHELPS DODGE: THE BEST-LAID PLANS .

JUST AS PHELPS DODGE celebrating its hard-fought battle to combine the two largest U.S. copper producers into the world’s largest, Grupo Mexico spoiled the party. On Oct. 7, the Mexican producer offered \$1 billion in cash for ASARCO, which it already owns 10%. ASARCO’s board is studying the latest offer.

ET CETERA . . .

- Priceline.com sued Micros and its Expedia travel Web site for patent infringement.
- Faced with falling sales, Coca-Cola will tweak its flagship soft drink’s image.
- Philip Morris publicly acknowledged the link between smoking and lung cancer.
- Interior Secretary Bruce Babbitt was cleared of charges of lying to Congress.

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PAULA DWYER

THE AMAZING NEW CLOUT OF A TEAMSTER NAMED HOFFA

Until recently, James P. Hoffa was the Rodney Dangerfield of the labor movement. He got no respect from other union chiefs or White House politicians, even after clawing his way to the top of the 1.4 million-member Teamsters last year. Although he billed himself as a reformer, many saw him as a throwback to the union's mob-linked past.

Today, Hoffa's reversal of fortune is nothing short of miraculous. Not only has President Clinton been wooing him, but he has Vice-President Al Gore and a clutch of other Presidential aspirants. And Hoffa is proving to be a swift student of political hardball. Consider the union leader's triple play on Oct. 1 when Clinton joined in a tribute to Hoffa, son of the legendary Jimmy Hoffa. The union currently operates under a government trusteeship and has been frequently investigated for payoffs, pension-fund looting, worker intimidation, and rigged elections. A photo of Clinton shaking Hoffa's hand "was worth \$1 million to us," says a Hoffa confidant.

But Hoffa got much more than a dinner check and a photo op. Clinton also hinted that the U.S.-Mexico border would remain closed to Mexican trucks after Jan. 1, when it is due to open under NAFTA. The Teamsters have been fighting for a postponement because open borders would hurt union truckers.

D PRO QUO? To return Clinton's gesture, Hoffa aides told the Prez that the Teamsters planned to endorse First Lady Hillary Rodham Clinton once she makes a formal Senate bid. Endorsing Hillary is a no-brainer: Her like-minded opponent, New York Mayor Rudolph Giuliani, 10 years ago fought a massive racketeering lawsuit against the Teamsters. The case was settled with the union agreeing to the current general trusteeship.

And therein lies Hoffa's third big achievement: getting Washington to focus on the Teamsters' top priority—terminating the trustee arrangement.

Since 1989, the Teamsters have paid \$85 million to cover the cost of federal supervision. As one of his first acts as union president, Hoffa named Edwin H. Stier, a tough former federal prosecutor, to head an internal anticorruption force. And in late September, Stier and Teamster lawyers met with aides to Manhattan U.S. Attorney Mary Jo White to begin the process of ending federal oversight.

True, Hoffa was unsuccessful in his bid to persuade the



HOFFA AND FRIEND

AFL-CIO to delay an early endorsement of Gore. His official line is that the federation should squeeze more concessions from the Veep, especially on trade. But Hoffa is known to believe that his ousted predecessor, Ron Carey, and Clinton/Gore campaign aides conspired to use Teamster funds to deny Hoffa the top job in 1996. That's why Clinton quietly put out feelers for a rapprochement. Says Gerald W. McEntee, president of the American Federation of State, County & Municipal Employees: "Hoffa has surprised everyone by being knowledgeable and engaged on the issues, but not in a confrontational way."

But that was before Hoffa spoke out against the Gore endorsement at the AFL-CIO conclave in Los Angeles on Oct. 10-13. "We disagree not necessarily with the candidate, but with the process," Hoffa said. "We instruct our leaders and shop stewards to listen to our

members—not preach to them."

While Hoffa is impressing former detractors, he still has to keep his rank and file happy. That means beefing up membership rolls and striking tough collective-bargaining agreements. Says University of Michigan labor-management relations professor Michael H. Belzer: "He's come a long way, but now he has to deliver." Still, Hoffa's recent performance demonstrates that he is amassing the clout to do just that.

With Aaron Bernstein in Los Angeles

CAPITAL WRAPUP

WILL IT BE LOTT VS. HAGEL?

Is Senator Chuck Hagel (R-Neb.) looking to topple Senate Majority Leader Trent Lott (R-Miss.)? Maybe. Hagel is actively raising money for a new leadership political action committee, fueling speculation that he may seek a top post next year. Such PACs often are used to dole out funds to fellow lawmakers and build support for a leadership bid. While Hagel insists he just wants to help fellow GOPers, he has clashed with Lott over the GOP's sloppy stewardship of spending bills.

RIGHT-WINGERS FOR FORBES

► Conservative support is building for Presidential hopeful Steve Forbes. On Oct. 10, Forbes won endorsement from the National Federation of Republican Assemblies, which seeks to push the Republican Party rightward. The 35,000-strong group held its first convention in Kansas City, where 62% of 283 delegates backed the millionaire publisher. Pat Buchanan, who plans to bolt to the Reform Party, polled 38%. In an earlier straw poll, George W. Bush took just 4%.

THE GOP'S BUDGET PLOY

► Amid the chaos of Capitol Hill's budget battle with the White House, at least Republican leaders have largely succeeded in keeping spending bills free of anti-abortion riders. Such measures infuriate moderates and give the President an excuse to veto appropriations. Conservatives are grumbling but for now are bowing to leaders' insistence that spending bills be kept "clean." The GOP's goal: force the President to take the blame for raiding Social Security.

GERMANY

TIME IS RUNNING OUT

Deutsche Telekom needs a partner, or it may be left out of the global market



As the world's telecom chieftains treat customers to foie gras and fondue and hold court with thousands of journalists at the giant Geneva Telecom99 trade show in mid-October, Deutsche Telekom Chief Executive Officer Ron Sommer is nowhere to be seen. Sommer, the 50-year-old head of the \$39 billion German operator, has ducked out of panel discussions and shunned the press.

It's no secret that Sommer has more urgent business to attend to. Over the past 12 months, Deutsche Telekom has suffered a series of strategic defeats. Sommer's bid to acquire Telecom Italia failed in May; a key alliance with France Télécom and Sprint Corp., called Global One, imploded in September; and his effort to buy Sprint crumbled on Oct. 5 when Chairman William T. Esrey announced Sprint would be acquired by MCI WorldCom Inc.

Those setbacks now threaten to derail Deutsche Telekom's development in global markets, which it desperately needs in order to offset erosion of its core businesses at home. Company officials insist Sommer is tied up in negotiations, but rivals put

it more bluntly: Sommer is fighting for Deutsche Telekom's long-term survival as an independent phone company.

With the global industry consolidating rapidly, time is running out for Sommer. If he doesn't secure a large U.S. partner soon to extend the German operator's reach, market experts say Deutsche Telekom will be unable to compete in global markets with larger, faster-moving rivals such as MCI WorldCom, AT&T, and British Telecommunications. AT&T and BT, which combined their international assets in a 1998 joint venture, announced on Oct. 11 a major expansion of their high-speed global Internet service. Even in Europe, Deutsche Telekom lacks critical mass.

As long as the German state keeps its controlling stake in Deutsche Telekom, the company is shielded from a hostile takeover. But now, government officials are dropping hints that they plan to sell off the remaining 66% state stake in tranches starting in mid-2000. A large-scale privatization would turn up heat on Sommer to perform, and make DT a plum target.

Sommer also risks cutting a rash and expensive deal. Rival telecom executives expect him to announce a U.S. acquisition soon. With Sprint out of the picture, possible targets include Global Crossing, the Internet and long-distance company, or SBC Communications Inc., which is merging with Ameritech Corp.

But there is no simple solution. Sommer needs a hefty boost he needs. Most of the large players have already found partners. Acquiring a smaller company such as Global Crossing would solve Telekom's strategic dilemma and is pricey, analysts say. It's still building its global network, thin on multinational customers, and boasts a market capitalization of \$10 billion.

In August, smarting from the loss of Tele-



LOOKING: Sommer is shopping.

DEUTSCHE TELEKOM

UNDER SIEGE AT HOME...

- Slow to cut prices, DT has lost more than 30% of the long-distance market since deregulation took effect on Jan. 1, 1998
- European Union regulators are pressuring DT to sell part of its mobile-phone network
- The German government is likely to start selling its remaining 66% stake in tranches beginning in mid-2000, making the company vulnerable to a hostile takeover

...AND STUMBLING ABROAD

- DT lost merger partner Telecom Italia to a hostile takeover by Olivetti
- Its Global One alliance with Sprint and France Télécom is collapsing just as rivals such as MCI WorldCom are expanding

ia to puny rival Olivetti, Sommer
ght Britain's fourth mobile phone
rator, One-2-One, for \$13.86 billion
ash and debt, a price analysts say
too rich. "One-2-One lacks high-
gin business customers," says one
cutive at British mobile rival Or-
e PLC. "They've got everything
kwards."

But the pressure is on. Only 4% of
utsche Telekom's revenues last year
ie from international operations.
anwhile, dozens of fierce competitors
pouring into the German giant's
ne market. Last year, DT lost 30% of
long-distance market to new players
h as Mannesmann. On Oct. 4, former
France Télécom stormed into DT's
kyard with the purchase of a 17.2%
ke in German mobile phone operator
Plus Mobilfunk for \$1.8 billion. As a
ult of price wars, DT's sales in the
t six months fell 4%, to \$17 billion,
net profit declined 4.5%, to \$1 billion.

UNTERATTACK. Sommer has made
re headway. He has whittled away at
utsche Telekom's huge debt, shed
sonnel, and generated growth in In-
net and mobile services. That coun-
attack has helped push the share
ce up 37% this year, to \$44.71. But
s 14.7% weight in the DAX index
ps prop up the price, since managers
DAX index funds have to own a cor-
ponding number of DT shares.

Many say Sommer would be in a pole
sition had he negotiated to buy Sprint
one of the Baby Bells three years
o. Now, it may be too late. "Even if
closes a deal, he has to make it work
t—and DT's not moving fast enough,"
ys one London-based telecoms con-
sultant, who gives DT at most three
ars before it's a takeover target.

Sommer also risks creating new ri-
ls. Regulators have been pushing him
sell at least part of Deutsche Tele-
m's extensive cable business by
arend. More than 20 bidders have al-
ady emerged to jockey for access to
rmany's 18-million strong cable sub-
scribers, which is 41% of the total West
ropean market. The buyer or buy-
s could upgrade the cables and use
em to launch cheap telephone and
gh-speed Internet services.

Ron Sommer still wields big cash
ows and enjoys the protection of the
ate. But the dealmaking he does in
e coming months will either catapult
eutsche Telekom into the top tier or
ave it stranded on the sidelines. With
challenge like that, no wonder he jilt-
the hordes at the Telecom fest in
eneva.

By Gail Edmondson in Rome, with
ck Ewing in Frankfurt, Stephen Bak-
in Geneva, and Bill Echikson in
russels

FRANCE

STORMING THE ART BARRICADES

Sotheby's and Christie's
prepare for deregulation

It seemed like any other preview of
high-end art going up for auction.
Strolling through Sotheby Inc.'s ele-
gant new showroom in Paris recently,
guests sipped champagne and admired a
display of historic French photographs
and rare books. Then came the odd
part. After the party, the exhibit was
shipped to London, where the 433 items
are to be auctioned on Oct. 27. Why
the laborious shift in locale? Sotheby's
can't sell in Paris because auctions in
France are a government monopoly.

Mark it down as another hallowed
French tradition soon likely to change.



Since the 16th century, France has allowed only a
small group of government-
appointed specialists to run
auctions. They aren't just
closely regulated; they're
considered government of-
ficials. But under pressure from the
European Union, France could open its
market as early as next year.

SHAKEUP. That will give Sotheby's and
rival Christie's International PLC their
first crack at one of the world's biggest
art and antiques markets. It will also
shake up France's dowdy auction busi-
ness—an industry worth \$1.4 billion a
year in sales. "We are going to re-
animate the art market in this coun-
try," says Hugues Joffre, director of
Christie's in France.

It's easy to see how. Sotheby's and

Christie's, each with nearly \$2 billion in
sales, dominate the global auction mar-
ket. Taking a big chunk of the action in
France will help them enlarge the mar-
ket dramatically. With worldwide con-
tacts, the industry leaders can draw
more collectors to Paris. And there will
be more to buy, too. Many French sell-
ers, unhappy with the prices auctions
command under the current system,
now ship salable items abroad. If Sothe-
by's and Christie's auctions end up
boosting prices, more art works and an-
tiques are likely to be sold at home.

Sotheby's has already tasted the
market. With much fanfare last June,
it auctioned off a \$17.5 million collec-
tion of paintings and objects at the
Château de Groussay outside Paris.
Now, Sotheby's and Christie's are set
to move when the gates open. Sotheby's
opened a showroom last year near the
Elysée presidential palace. Christie's
will open on chic Avenue Matignon in
December. François Pinault, a tycoon
and art lover, may have added to the

A SLEEPY MONOPOLY The Hôtel Drouot in Paris is home to many government-appointed auctioneers

reform effort when he
bought a controlling stake
in Christie's last year.

All this is producing
gloom at Hôtel Drouot,
cluttered home to many
French auctioneers. They

are proud and highly educated—but not
marketing geniuses. Most operate on a
shoestring. "If you don't have the fi-
nancial clout to open a pretty boutique,"
laments Marie-Christine Robert, an auc-
tioneer since 1989, "you will die out."

Some French will miss Drouot's at-
mosphere and service. But many say
reform is overdue—and could transform
some French houses into modern busi-
nesses. In the end, Sotheby's and
Christie's may not celebrate alone.

By Carol Matlack,
with Inka Resch in Paris

HONG KONG

TOO MUCH OF A GOOD THING?

The territory has to unload shares without killing the market



Hong Kong Financial Secretary Sir Donald Tsang is facing the kind of problem that most Finance Ministers would die for. Over the past year he has watched the government's \$15 billion portfolio of local stocks soar in value to about \$27 billion. So what's the problem? He has to sell the shares. And do so without depressing the market. The government famously acquired them in August, 1998 when it fended off speculators who were dumping them during a regional meltdown. In a little more than two weeks, it became one of the largest shareholders in some of the territory's most prominent companies.

That has worried many investors. A government that was supposedly Asia's staunchest free-market booster had effectively nationalized about 7% of the benchmark Hang Seng index. Tsang promised to sell, raising the fear that once he did, the sales might undermine the market. He's trying to whet the appetites of local retail investors with a promotional blitz. But he really needs to attract big foreign buyers, such as pension and mutual funds. Their initial reactions to the first stage of the great sell-off, unveiled on Oct. 11, were distinctly skeptical, however. The government has packaged part of its portfolio into an index fund that replicates the 33-stock Hang Seng exactly. It will offer

about \$2.5 billion worth of shares at a discount to be set on Nov. 8. Most analysts figure the discount will be about 5% of net asset value—and too low. "There is no incentive to buy the fund without a sizable discount," says Jui Lai, who manages a \$2 billion Asian portfolio at Boston's Grantham, Mayo & Van Otterloo. "We would consider buying it at a 7% to 8% discount."

Even much bigger discounts wouldn't be enough for some. "I'm not buying this," says Paul Matthews, president and chief investment officer of San Francisco's Matthews International Funds, which manages \$330 million of assets. "Our opportunity to add value is

in picking stocks." The trouble for investors is that the government's Tracker Fund of Hong Kong (TraHK), designed by Goldman Sachs, ING Investments, and Jardine Fleming, is stuffed with old-line real estate development companies and banks that lack the buzz of New Economy stocks. What's more, some potential buyers don't want to get stuck with mainland red chips.

All the same, the Exchange Fund Investment Ltd., the government body that manages the holdings, has tried to cater to large investors' needs. The fund can, for example, turn in 1 million fund units and receive the underlying stocks in exchange. Conversely, investors can present packets of stocks and receive fund units. Such switches should keep the values of the fund and the underlying shares in step. In fact, TraHKs should behave like the popular "Spiders," Standard & Poor's 500 Index

BUY HERE?

Hong Kong is wooing locals—but it needs big foreign buyers

Depository Receipts on which they are modeled.

Unfortunately, Tsang, Hong Kong markets are far less liquid than American ones. Hong Kong's biggest initial public offerings

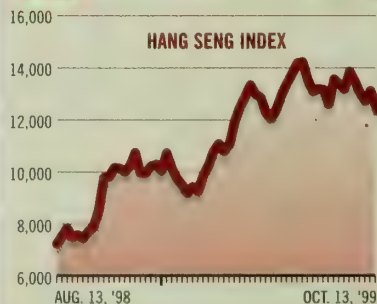
for example, was \$2.4 billion, raised by China Telecom (Hong Kong) Ltd. in 1997. That's the size of the initial tranche of TraHK, yet only one-tenth of the government's holdings. So more shares will be sold every three months. Foreign fund managers guess that the amount may be between \$1 billion and \$2 billion—raising a worry that the government might unduly influence the market by turning the spigot on and off.

Tsang knows that he will have to get rid of shares by other means. The government has mulled selling its own shares back to companies, placing shares through block trades or issuing bonds that buyers could convert into shares when stock prices reached designated levels. The government also intends to keep about \$6 billion worth of shares.

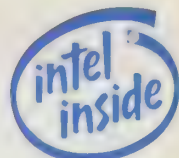
Investors hope that's all. The temptation to hold on to more may grow. The Hang Seng has been drifting in recent weeks, and a spike in U.S. interest rates could push it down further. That could slow the great sell-off. And with the government possibly intervening in the stock exchange every few months when it decides how many new TraHK shares to release, it will be a long while before Hong Kong's bureaucrats leave the market to itself.

By Bruce Einhorn in Hong Kong and Susan Berfield in New York

HONG KONG BOUGHT LOW, WANTS TO SELL HIGH



DATA: BLOOMBERG FINANCIAL MARKETS



pentium!!!



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ASIA

A BUSINESS-TO-BUSINESS E-BOOM

Asian companies are getting wired—and selling to each other

Aaeon Technology, a Taiwan maker of specialty computers, is typical of the thousands of small companies that make Asia the world's workshop. The hardworking managers who run Aaeon have watched every penny as they pushed sales to \$20 million.

That thriftiness is what makes a recent purchase by Aaeon so exceptional. Its board, after contentious debate, has decided to shell out \$500,000 for a system from software giant Oracle Corp. that will let Aaeon manage parts procurement, inventory, sales, and finances over the Web. It's a huge leap for Aaeon, but the company figures it has no choice. "If we want to stay competitive, we need to have e-commerce," says Jessica Chu, Aaeon's marketing manager.

Internet mania is sweeping through Asia, with venture capitalists rushing to buy stakes in portals that cater to consumers. Those portals may generate most of the sizzle. But it's business-to-business e-commerce that could have a profound impact on the way Asia's manufacturers operate.

LEAPFROG. Already, the business-to-business segment is Asia's fastest growing area of e-commerce. By 2003, sales of business-to-business e-commerce software alone are expected to top \$1.3 billion a year, says International Data Corp. Online e-commerce sales in Asia are expected to surge, from \$2 billion this year, to \$32.6 billion in 2003.

The authorities are getting into the act. Taiwan wants 50,000 companies to be online by 2001. Thailand is requiring all export and import documents to go online. Governments "have recognized the Internet as the vehicle to leapfrog them into the new millennium," says Pete Hitchen, a Singapore-based Internet analyst at IDC.

Building this new model isn't going to be easy. Unlike in North



America and Europe, the supply chains and distribution networks of East Asian companies often stretch from Taiwan to mainland China to the Philippines and other countries. Businesspeople also prefer dealing face to face and relying on relationships cultivated over years.

But plenty of entrepreneurs are betting that these attitudes will change. Wang Xiaolai is setting up an online service in Shanghai to integrate car manufacturers with parts suppliers around China. His China Automotive Rainbow

Network hopes to have 1,000 members and charge them for transactions made on its system. "We can make a complete supply chain," says Wang.

Taiwan has been among the fastest to adapt to e-commerce. Zero Technology Co., a \$45 million maker of computer-network servers, now generates 10% of its sales through the Taiwan Computer Assn.'s Computex online Web site. The embrace of e-commerce by Asia's largest companies is also helping drive this growth. Singapore-based Advanced Manufacturing Online, which boasts such clients as Motorola, Matsushita, and Taiwan Semiconductor Manufacturing Co., runs a system that enables suppliers and customers to send orders and solicit price quotations over the Web.

NEW MIND-SET. One big obstacle to e-commerce is the reluctance of Asian companies to outsource important functions, such as accounting and billing, which is a key element

of business-to-business e-commerce. And supply-chain management programs require users to open their inventory and procurement processes to suppliers and customers.

That calls for a big change in mind set. "People don't have the confidence to put sensitive information on the Internet," says Kevin Jiang, director of Computex Online, the Net marketplace for computer-hardware makers.

But here, too, there are signs of change. In Asia, IBM used to sell its commerce services almost entirely through huge conglomerates, but now there is strong growth from small and midsize companies. And these small companies are asking for more advice on designing management. "They used to say: 'Tell me what I should buy,'" says Howie Lau, who heads IBM's commerce operations out of Singapore. "Now they are asking more sophisticated questions." They should keep asking. The faster Asian business goes Net-savvy, the better.

By Jonathan Moore in Taipei, and Bruce Einhorn in Shanghai



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JUBILANT: Some Pakistanis are hoping the change will help the economy

PAKISTAN

THE WORLD'S WORST NUCLEAR NIGHTMARE?

Pakistan's coup has put a risk-taking general in charge

The Oct. 12 news from Pakistan sent a chill through the world's capitals. A hawkish military general, Pervez Musharraf, had seized power in a bloodless coup and ousted that country's democratically elected Prime Minister Nawaz Sharif. Exactly where Musharraf stood on using nuclear weapons, transferring nuclear technology to Islamic fundamentalist friends, or provoking further conflict with longtime enemy India was a bleak and scary unknown. "This is exactly the kind of thing we have always worried about," says non-proliferation expert Joseph Cirincione of the Carnegie Endowment for International Peace in Washington. "This sends the red alarm lights off."

With good reason: The coup d'état in Pakistan is the first-ever coup in a nuclear weapons state. Russia came close in 1991, but that coup was put down quickly by Boris N. Yeltsin. In Pakistan's case, the potential threat is more severe because its new leader, Gen. Musharraf, is a known risk-taker in his previous dealings with neighboring nuclear state India. Troops under his direction were responsible for the incursions into Indian-controlled Kashmir that sharply increased tensions

with India in July and nearly led to all-out war. It was only Prime Minister Sharif, under pressure from Washington and other powers, who ordered the military to back down.

That humiliation for the army strained already tense relations with Sharif. The final straw came when Sharif tried to sack Musharraf and replace him with his chief intelligence officer, Gen. Zia Uddin Butt.

Musharraf's initial speech after taking over compounded fears about military rule. Rather than wear a dress uniform when he appeared on Pakistani television, Musharraf wore combat fatigues that recalled his previous experience as a commando in Kashmir. In his speech, he blamed Sharif for destroying government institutions and trying to sow discord within the army. He then postponed a second scheduled address on whether the military would seek a return to civilian, democratic rule. Early reports said he had asked Presi-

dent Rafiq Tarrar to remain in office.

India initially put troops on its border with Pakistan on a high state of alert, but it also signaled a willingness to talk with whatever institution was in charge in Pakistan. "Some people here can feel better to deal with the military directly now," notes Kanti Bajpai, international relations professor at Jawaharlal Nehru University in New Delhi. "While the army was in the shadows, things were too murky."

Pakistanis, weary of economic hardship and endemic corruption, gave military rule a similarly muted reaction. Some welcomed the news with cheering in the streets. Others lamented that Pakistan again would be ruled by generals, as it has been for half of its 47 years of independence.

All hoped that whoever is in charge can help pull Pakistan out of its impoverishment. The country this year was faulted on \$3.3 billion in loans from other governments and \$877 million in loans from commercial banks. Already Pakistan, alone with Russia, carries Standard & Poor's lowest credit rating, SD, for Selective Default.

IMF'S DILEMMA. This situation could deteriorate further if aid is now suspended. Pakistan is currently under a \$1 billion International Monetary Fund program, which officials warn could be jeopardized. "The change in government clearly will have implications for how we go forward and possible implications for the economy," says IMF spokesman Thomas Dawson.

It's a tricky situation for the IMF and for Washington. If they withdraw aid, they could destabilize an already unstable economy. They might also drive a military with fundamentalist sympathies further into radical Islamic camps. Musharraf has ties to the fundamentalist Taliban in Afghanistan. And Sharif has previously said that terrorists were being trained with Pakistan army backing in Afghanistan.

An unstable, fundamentalist-leaning nuclear

power is a prospect far scarier than the old Soviet threat. "Pakistan, the world's smallest and poorest nuclear country, telling us the nuclear future is going to be unstable," says Carnegie's Cirincione. It's a message the world doesn't need to hear.

By Sheri Prasso in New York and Shahid-ur-Rehman in Islamabad, with bureau reports



MUSHARRAF: Hawkish



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EDITED BY SHERI PRASSO

INDONESIA: WHOEVER IS PRESIDENT WILL ANSWER TO GENERAL WIRANTO

For a while, Megawati Sukarnoputri had the edge in the race for Indonesia's presidency. Her party had won the highest percentage of the popular vote in the June elections, and she enjoyed the apparent backing of the military. So the betting was that when legislators voted for a President on October 20, Megawati would walk away with the crown.

But now all bets are off. Instead, the odds of a strong presidency emerging from the chaos decline every day.

Megawati could still end up as the next President. But so could current President B.J. Habibie—or blind Muslim cleric Abdurrahman Wahid, who leads a coalition of seven Islamic parties. And none of them seems to have the stature needed to lead Indonesia's unruly People's Consultative Assembly and so push through needed reforms. None of them can stem the influence of the military. And to secure backing, all these candidates may capitalize on the rise in nationalism. That, in turn, could scare off badly needed foreign investment.

STUDENT VIOLENCE. The biggest surprise is that Habibie, though wounded by a banking scandal and the disaster in East Timor, is staging a comeback. If he wins, the consequences could be explosive. Habibie, who took over after Suharto stepped down in May, 1998, is opposed by the thousands of pro-democracy students on campuses around Java. This group turned out heavily on June 7 to vote for Megawati's Indonesian Democratic Party. If a Habibie victory sparks student violence, the ultimate winner could be Armed Forces Commander-in-Chief Wiranto, who could justify a stepped-up role for the military.

Megawati herself unwittingly resuscitated Habibie's chances. First, she snubbed an offer by the head of the ruling Golkar party to shift the party's support to her from Habibie.

And she now refuses to work with Wahid, who has said his supporters oppose the idea of a woman president. Megawati's quarrels ended an earlier effort to forge links between her party, Golkar, and Wahid's group. "If she has a strategy, it's confusing," says Jusuf Wanandi, director of the Centre for Strategic & International Studies in Jakarta.

Megawati's only hope now may be to patch things up with Wahid. Meanwhile, Golkar insiders say Habibie is gaining ground by promising the assembly, which is heavy with

Suharto-era figures and 56 army generals, five more years of generous kickbacks. Habibie's office did not answer requests to discuss the allegation.

As the confusion grows, so does General Wiranto's power. In mid-July, Wiranto secured the support of his regional commanders to become a powerful vice-president and a figurehead President—who at that time was expected to be Megawati. Now, Golkar officials say Wiranto has agreed to run as vice-president on Habibie's ticket. "Wiranto is presumably looking for a weak President, and at this point Habibie looks like the best candidate," says Harold Crouch, an Indonesian expert at Australian National University. Wiranto dined with Habibie at the presidential palace on Oct. 13.

With Wiranto's influence on the rise, and with new political camps asserting themselves in the assembly, power is already draining away from the presidency. "It has reached the point where it doesn't really matter who the President is anymore," says Bruce Gale, Singapore-based regional manager of the Political and Economic Risk Consultants Ltd. Indonesia's experiment with democracy is certainly not over. But its long-term health remains very much in question.

By Michael Shari in Singapore



POWER PAIR? Wiranto, Habibie

GLOBAL WRAPUP

BLAIR PICKS HIS OWN

► After more than two years of struggling with old party hacks, British Prime Minister Tony Blair on Oct. 11 formed a government more in his own New Labour image. The new Cabinet gives prominent roles to a group of fortysomething Blair acolytes. They include Alan Milburn, who takes over the hugely expensive Health portfolio; Geoff Hoon, a surprise choice to run Defense; and Andrew Smith, who takes the No. 2 role at Treasury. Peter Mandelson, architect of Blair's victory

in 1997, becomes Northern Ireland Secretary in a surprisingly quick comeback. Mandelson resigned from the government in disgrace last year after it was discovered that he had accepted a \$600,000 loan from a Cabinet colleague. Another of the "Blair boys" is Stephen Byers, the incumbent Trade & Industry secretary. All are considered business-friendly modernizers.

MAHATHIR BACKS DOWN

► Saying there was "no hurry," Malaysian Prime Minister Mahathir Mohamad caved in on his plan to

merge all of his nation's 21 domestic banks, 25 finance companies, and 12 merchant banks into six large groups headed by "anchor" banks picked by the government. The plan had been criticized as subjugating well-run ethnic Chinese-owned banks to Muslim Malay-run banks owned by associates of Finance Minister Daim Zainuddin.

But Mahathir's change of heart could have a severe impact on investor confidence. The reversal confirmed predictions that the push to merge troubled financial companies would fail, as did an earlier attempt in late 1997.

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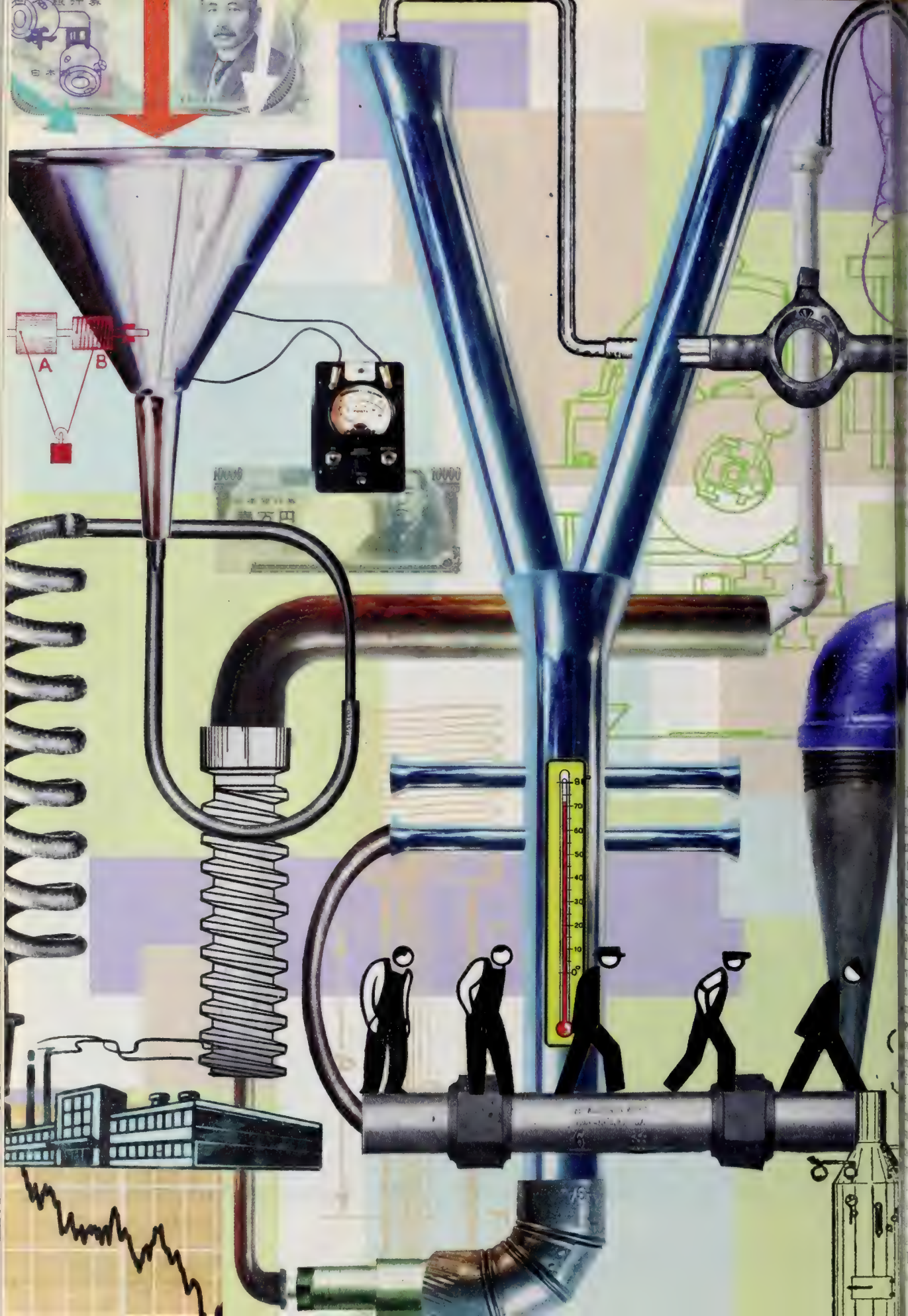
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Special Report

It was a chilling moment, a throwback to the days before the crisis. On Oct. 5, Hakuo Yanagisawa, Japan's point man for financial reform, was abruptly removed. In his place: Michio Ochi, a 70-year-old ex-bureaucrat from Ministry of Finance (MOF). Yanagisawa, in his brief tenure, actually acted like a regulator, calling Japan's wayward banks to task, forcing mergers, and opening the sector to foreign investment. Now the markets fear that Ochi, an insider, will lead the forces of reaction to undo Yanagisawa's work. The government insists that Ochi is every bit the reformer Yanagisawa was. Yet Yanagisawa's sudden exit bolsters the skeptics who contend that the Japanese Establishment, despite the battering it has taken, will still find a way to preserve its cloistered economy—and remove anyone who seeks to open it. Reform? Yes, but just enough to prevent another real crisis. As for the painful change that will produce a more open society and economy—well, that will have to wait.

Still, in unexpected places, glimmers of a quiet revolution can be discerned: in foreign brokerages sprouting in Japan, where more and more investors are covering online trading and af-

fordable investments; at the Mazda Motor Corp. engine plant in Hiroshima, where women are finally allowed to work the higher-paying night shift; or in Tokyo's hip Shibuya district, where Internet startups are beginning to bloom. Hiroshi Mikitani, 34, for example, feels at home in Shibuya, where he's running Japan's hottest online shopping mall, Rakuten. He used to hold a high-prestige job at the conservative Industrial Bank of Japan. Now he's a full-fledged citizen of the Net. Says Mikitani: "There will be a tremendous jump this year and next for the Internet economy."

POPULAR WILL. Naysayers would say these trends aren't enough to transform Japan Inc. After all, over the decades, plenty of pundits have waited in vain for Japan to change itself. And yet, this time there's something different about the new forces at work. Some of the advocates for reform come from within the government. But much change is now inspired by foreigners, executives, entrepreneurs, and ordinary Japanese—rather than orchestrated at the top by the ministries. That wasn't the case in the other big periods of reform in Japan, such as the Meiji Restoration or the occupation years, when change was more a matter of government fiat than a popular will. If the ministries cannot dictate all the change, they cannot control it, either.

There's also a profound shift in mood in Japan. Anthropologist and author Noriyuki Ueda thinks the flip side of

Japan's economic slide this decade "is the collapse of our cultural and spiritual values" rooted in Confucian deference to authority and the postwar fixation on the economic advancement of Corporate Japan. That fixation on growth, in the minds of Japanese, led directly to the bitter aftermath of the bubble economy.

Clearly, many Japanese want something different, as recent surveys prove (page 78). Even among some of Japan's mandarins and executives, there's a grudging recognition that something has to



A NEW JAPAN?
The collapse of the bubble economy, increased foreign influence, and the Internet may finally bring about real change

give now that every old strategy to break out of stagnation has been exhausted. Says Shosaku Yasui, chief executive of textile giant Teijin Ltd.: "The Japanese system of doing business has hit a wall." Executives at the banks, long the most protected of all industries, fear the fail-safe guarantees are gone. "We aren't restructuring because MOF is telling us to," says Kaneo Muromachi, the new president of Sanwa Bank Ltd. "We are doing it because we need to survive."

This dislocation is giving opportunities to outsiders they never had. Sometimes the outsiders are foreigners. Sometimes they are Japanese who have decided to check out of the traditional ways of corporate work to strike out on their own.

Foreign capital, especially, is exerting an influence it never



DEATH OF THE SALARYMAN

Jobs for life are increasingly unavailable. That's scary, but it's also a healthy change, because it means executives are free to go where they are most productive

did before. Consider that every Saturday afternoon, Japanese tune into a hit program called *Money Angels*, a dramatic series focused on financial advice. Its sponsor: Goldman, Sachs & Co. The U.S. investment bank is making a killing selling mutual funds, raising money for cash-starved Japanese companies, and managing pension funds for the likes of Mitsubishi and Matsushita—all sectors foreign firms were essentially excluded from until recently. U.S. players such as E*Trade Group Inc. and Charles Schwab Corp. are setting up online trading services now that stock commissions are fully deregulated.

There's a corresponding pickup in foreign acquisitions in Japan. Britain's Cable & Wireless PLC, for example, acquired control of Japanese overseas phone carrier International Digital Communications earlier this year—and even offered 10% of its workforce stock options, a big innovation in Japan. In late September, Diversified French holding company Artemis picked off the remnants of bankrupt Nissan Mutual for about \$240 million. The Japanese have reacted calmly to these incursions: "There isn't any sense of [economic] nationalism in this regard," says Kaoru Yosano, Minister of International Trade & Industry. "That's a huge change in Japanese society."

All told, foreign investment is running at an annualized rate of \$125 billion, some three times last year's pace. The huge influx of overseas portfolio investment since last fall has put some 15% of the Tokyo Stock Exchange's \$3.7 trillion market

capitalization in foreign hands. That compares with 5% a decade ago and now surpasses the holdings even of Japanese banks.

The presence of more foreign companies is casting an even more favorable light on Japan's banks and domestic manufacturers. Foreign companies operating in Japan boast an average return on equity of about three times the average of local companies. With banks unable to refresh money to corporate borrowers, companies will need to compete in global capital markets, where credit ratings, corporate governance, and operational efficiency matter. So they'll have to raise their return on equity fast.

"EMERGING MARKET." The pressure from capital markets is already being felt at trading company Kato Matsushita Corp., which lost \$400 million in the latest fiscal year and saw its credit rating slashed to junk status. Now it's announcing plans to cut 40% of its workforce and shut down or sell off some 160 of its odd businesses. Such cases convince Western investment bankers that Japan is the next big restructuring play. "Japan is like the biggest emerging market in the world," figures analyst R. Wolsstencroft, a Goldman Sachs Japan managing director.

The embodiment of foreign influence today is Carlos Ghosn. A top Renault executive, he has been patched by the French auto maker to turn around Nissan Motor Co., almost 37% owned by Renault. He's been grilling managers, from post-breakfasts at 7 a.m. to late-night sessions,

over every facet of operations—product design, brand management, and finances, to name a few. "Everybody is looking at him as a savior," says Hisayuki Sakamoto, executive director of Tokyo Nissan Auto Sales Co. Above all, Ghosn is trying to instill a sense of crisis. "There is no sense of urgency," says Ghosn. "You should come to the headquarter, and the walls should be on fire."

But some Japanese do have a sense of urgency about the business. They're the entrepreneurs of the Internet, and their restless energies are already causing a stir in official Japan.

Former Finance Ministry diplomat Eisuke Sakakibara, now at Keio University, thinks the Net could have an explosive impact on Japan's closed society. "This is a different kind of world, where

individuals and small groups really count," he says.

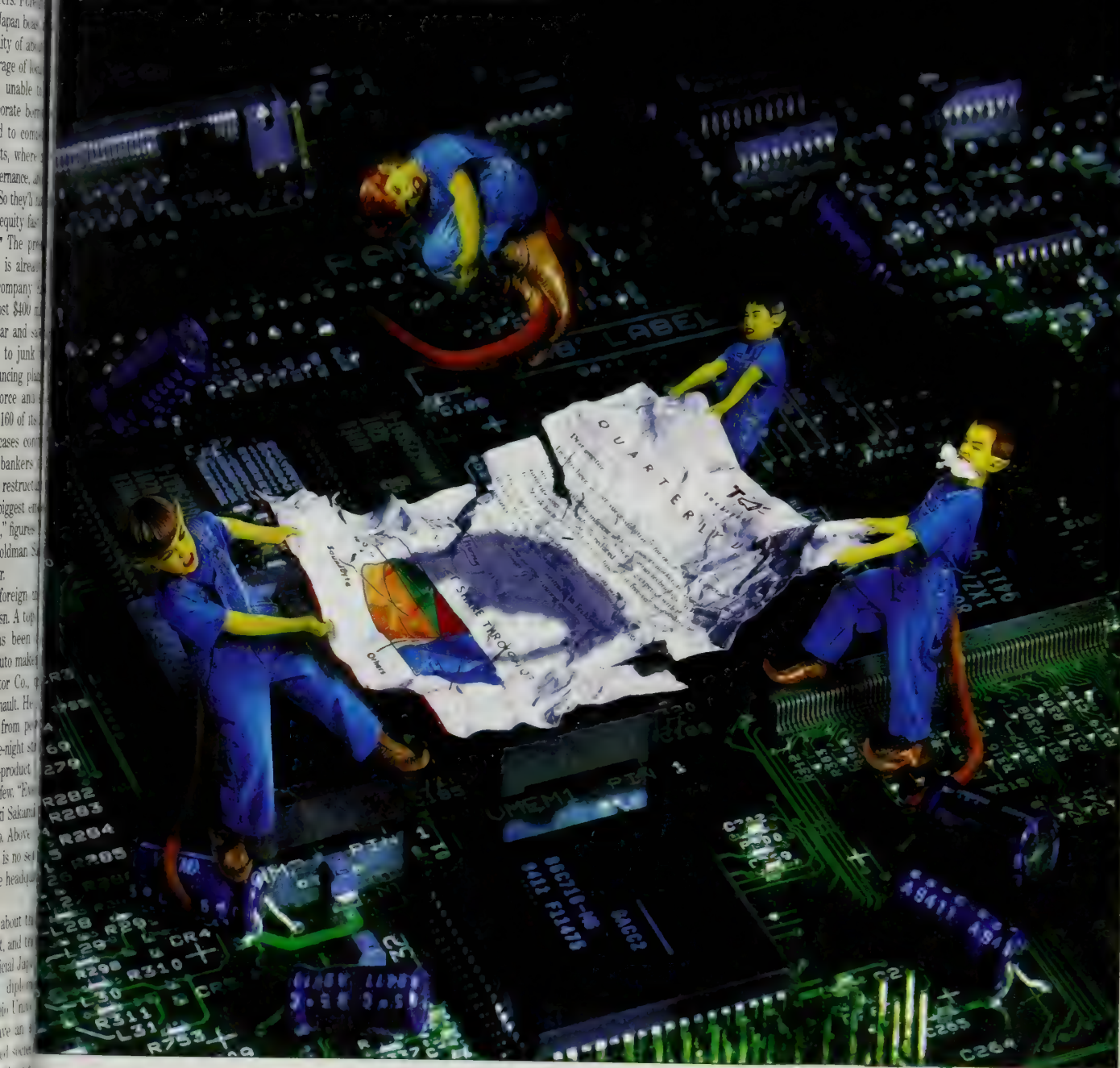
Japan's silent majority is using the Internet to speak out. In July, an embarrassed Toshiba Corp. issued a public apology to an irate customer who assailed the electronics giant on the Net because of a shoddy Toshiba videocassette recorder he had purchased. A citizens' group opposed to a new airport in Kobe was ignored by the local government—until it aroused a furor over the Net. Tokyo officialdom, says Joji Ito, president of Internet portal Infoseek Japan, now confronts a "paradigm shift from the concept of 'money equals power' to 'information equals power.'"

Perhaps that's why Prime Minister Keizo Obuchi is go-

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A NEW JAPAN

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A CYBER REVOLUTION

Subversive, yet constructive, the Net is energizing entrepreneurs, creating jobs, and giving a voice to the silent majority

ting tutorials on the explosive growth potential of the Internet and e-commerce from Softbank Corp. founder and cybermogul Masayoshi Son. Not only does the Net give voice to the silent majority, but it creates jobs, too. Japan's information and technology sectors have been outstripping Japan's nontech industrial output by a factor of three since 1995. Demand for information service jobs has been growing 3% annually, while sinking just about everywhere else. Shipments of all sorts of PCs, including new and sub-\$1,000 models with one-click Internet access, soared a record 80% in the first quarter.

New corporate stars are emerging from this ferment. Thanks to a low-cost strategy and nimble manufacturing, Sotec Co. is now Japan's sixth-largest PC maker. Cyber Agent is Japan's biggest online ad network, producing ads each month for 200 Japanese corporate clients. And Masayoshi Son's brother Taizo has founded Indigo, a leading provider of e-commerce services to Japanese retailers.

trigger an inflow of billions in new investments.

INDIVIDUAL INVESTORS. As change starts to swirl around them, many ordinary Japanese are frightened. But many are also becoming agents of change themselves. The newest players in the stock markets, for example, are individual Japanese. A recent Bank of Japan survey found that the portion of household savings put to work in equities has risen to 7%

first increase in three years.

What's more, some \$430 billion worth of 10-year postal savings deposits, offering yields of 6%, are expiring this year and in 2001. But now the postal bank, run by the Ministry of Finance, cannot afford to do much more than zero returns. So that money will flow to equity markets. "It's every investment strategist's dream," says Merrill Lynch & Co. economist Jesper Koll. The new investors will demand better performance from the stocks as they seek to prepare for their retirement.

No wonder that bookstores are brimming with titles on

Special Report

A NEW JAPAN

CHANGE IN JAPAN: PROGRESS....

FOREIGN INVESTMENT

Direct and portfolio investment from abroad is on track to hit \$125 billion this year, a record

DEREGULATION

Finance-sector deregulation is already putting downward pressure on brokerage and banking fees

TECHNOLOGY

Internet use is taking off, with the number of Japanese Netizens expected to rise 35%, to 23 million, between 1999 and 2000

SOCIETY

Women are gaining more freedom at work, and more college graduates are seeking jobs with foreign companies and startups

....AND OBSTACLES

BANKING

The banks have been rescued, but there has been little progress in selling off the bad debt and clearing the market

TELECOMMUNICATIONS

Phone giant NTT still has a stranglehold on phone prices, imposing ruinous costs on Japanese who want Net access

RESTRUCTURING

There has been progress, but the really hard stuff—plant closings, mass layoffs—still lies ahead

REGULATORS

It's still unclear how reform-minded the Ministry of Finance and the ruling Liberal Democratic Party really are

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EXPOSING JAPAN

Japan's increasing contact with the outside world is forcing it to conform to international standards of financial performance and competitiveness

financial advice and that seminars hosted by domestic and foreign investment houses are jam-packed. The Japanese are also starting to flock to online trading. Shin Tamura, 32, a consultant at Bain & Co. Japan Inc. in Tokyo, now trades online regularly with Nomura Securities, which drastically cut its online trading fees several months ago. Tamura figures online trading will take off: "My generation is accustomed to the Internet and e-mail and to doing things on the PC."

It's not just the world of investment that's changing. Consider the rebellion that's taking place inside Japanese homes. Divorce filings among older couples have doubled this decade. Younger women are putting off marriage to Japanese men or marrying foreigners. That's because life with a partner willing to skip their kids' ballet recitals to bond with superiors in the drinking parlors of Ginza has become intolerable. "I'm not looking for an economic supporter but an emotional partner," says Yumiko Nakamura, a 29-year-old working woman.

Special Report

A NEW JAPAN

ports. Japan's huge budget deficit, now 10% of gross domestic product, is proof that officialdom will pay any price to keep state machinery in place. Huge swaths of the economy—banking, construction companies, and small businesses—remain on government life support.

But Japan is also running out of room to forestall change now that national debt is heading for a level of around 140% of GDP. Nobody in Japan is quite ready to embrace the winner-take-all U.S. model. But there is growing recognition that the task of confronting Japan has less to do with particular culture or economic model—and everything to do with what works best at delivering prosperity. What is new is that broad sections of society, government, and academia are realizing that Japan's insularity must come to an end. And from such realizations do big transformations spring.

By Brian Bremner, with Emily Thornton, Irene M. Kuroki, and Miki Tanikawa, in Tokyo

Japan's workforce will start shrinking early next century. But it has a deep reserve to turn to: well-educated women. In most rich countries, some 70% of women have at least a high school diploma. In Japan, it's only 50%. If Japan can bridge that gap, reckons Goldman Sachs economist Kathy Mitsui, it could boost potential growth over the next decade from 0.3% to 2.5%.

REVOLUTIONARY CHANGE. These actions by individual Japanese indicate a greater appetite for risk—and more acceptance of the free market—than many had imagined. One indicator is the attitude toward taxes. When Japan decided last year to cut its top personal income-tax rate for wealthy Japanese from 65% to 50%, a cornerstone of the nation's egalitarian policies, Trade Minister Yosano figured the Liberal Democratic Party would face a major social outcry. There wasn't a murmur. "This is quite a revolutionary change for a society that has always valued even wealth distribution," says Yosano.

Such shifts in attitude, investment, family life, and work could eventually have a big impact. They could lead to a very different society—one where big companies drop their fixation on top-line growth to focus on profits and share performance, where smaller companies and startups have access to the kind of capital they need to flourish; and where individuals may face more economic insecurity but also have more freedom to map out their careers and their own financial futures.

These changes will not translate into fast economic growth immediately. Indeed, Japan's much-hoped-for recovery is likely to be a slow, halting affair for some time to come. "The restructurings are just beginning," says Daniel Fineman, chief Asia regional strategist for Jardine Fleming Securities Ltd. "Japan won't see the payoff for two years or more."

And many factors still weigh Japan down. The culture is still remarkably insular, and the government is still too obsessed with

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Eileen Cuesta

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- Larry Sanders, Vice President and General Manager, USATODAY.com



By Robert Neff

AN INFLEXIBLE JAPAN? LOOK AGAIN

One of the latest buzzwords flying around Tokyo these days is *hiraki naoru*. Like many Japanese expressions, its meaning can be ambiguous: to assume a defiant attitude—or to recognize one's wrongs and atone. The way it's being used lately refers to the latter definition, and specifically to the scrapping of at least some age-old practices in favor of a more Western-style political economy.

It's an interesting linguistic clue to one of the global economy's biggest puzzles: Are the Japanese really getting ready to change their ways? True, Japan's government is for the first time making some serious efforts to deregulate the economy, restructure companies, and generally winnow out the winners from the losers. But many observers argue that the Japanese cannot possibly embrace such big changes willingly. Not the Japanese, for whom stability has long been a cultural imperative.

U.S. MODEL. Well, maybe the Japanese are more resilient than we give them credit for. According to a survey conducted by the Dentsu Institute of Human Studies last fall, 52% of those polled said their country should opt for a society of equal opportunity but more risk, not the egalitarian model that has prevailed for decades. "The Japanese are being influenced by the U.S. model of society," says Shinji Fukukawa, chairman of the Dentsu Institute and former vice-minister of international trade and industry.

To be sure, the Japanese aren't about to become just like Americans. Yet they are reacting with amazing equanimity to the uncertainty that pervades their society today. A poll

taken by the Hakuhodo Institute of Life & Living at the bottom of last year's recession showed that while Japanese are feeling less economically comfortable than before, fully 82% said they are satisfied with their daily lives. Compared with 1994, more respondents answered that they frequently enjoy "events and situations" happening around them. "Happiness once had a strong relationship to one's company and the GNP," says Hakuhodo Institute's managing director, Hidehiko Sekizawa.

Special Report

A NEW JAPAN

Within a few short decades, the country completely remade itself, and most people coped resourcefully. After World War II, which devastated their country, the Japanese rebuilt with astonishing speed and embrace

many foreign concepts imposed by the Allied occupation. "Japanese

society has experienced shock therapy many times," notes Heizo Takemura, professor of economics at Keio University.

In that context, the shift today toward a more Western-style, cut-

throat economy likely will proceed fairly smoothly—the raft of scare-mongering headlines to the contrary. "Japanese people will accept this historic transition without realizing they've accepted it," says Kenichi Takemura, a prominent commentator. Nevertheless, Takemura observes, Japanese will continue to trust each other and internationalize as little as possible. They will also remain group-oriented and persist in putting a premium on harmony.

It will be a different kind of harmony, though.

Global forces are

imposing more market consciousness and self-reliance. Entrepreneurs will proliferate, heating up competition. Foreign companies will continue hornoring their way in. How the Japanese accommodate themselves to these developments will be fascinating to watch. But in my mind, there's little question they'll end up doing very well—as they usually do.

Contributing Editor Neff has lived in Japan for more than 20 years.



GOING WITH THE FLOW

Today's shift toward a more Western-style economy may be fairly smooth. Most people will accept this historic transition without realizing they've done so

"But since the bubble burst, Japanese people have matured. Their view of the government, their company, and the economy isn't so bright, but in their own lives, they are optimistic."

Looking back at Japanese history, this should come as little surprise. When Commodore Matthew Perry forced Japan's long-closed doors open in the mid-19th century, he triggered a domestic upheaval that came to be known as the Meiji Restoration.

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THE ART OF GIVING—WHEN YOUR RESOURCES ARE VAST

THEY'RE TWO OF THE RICHEST MEN IN the world, they're close friends, and they both believe that it's better to pass a fortune on to society than to one's offspring. Despite those similarities, Bill Gates and Warren Buffett have taken decidedly different approaches to charitable giving.

Gates has already established one of the world's largest foundations. Helping to oversee it is his wife Melinda French Gates. Buffett, on the other hand, has promised that his fortune will end up in the Buffett Foundation—but not until after his death. Heading up Buffett's charitable organization is

the mogul's former son-in-law, Greenberg. The Gateses fund education and health care; Buffett champions regulation control. The styles are different, but both foundations are well watched. By the time they're full-fledged, they're apt to be among the powerful charities in history.

“Melinda exults in being in a position to help”

WILLIAM H. GATES
SR., FATHER-IN-LAW



SELFLESS IN SEATTLE

Melinda Gates is tackling world—and local—problems

Charlotte Guyman bumped into her best friend, Melinda French Gates, and her husband, Bill, at a neighborhood Indian restaurant just outside Seattle a year or two back. After the usual pleasantries, Guyman and her family made their way to a nearby table. A

minute or two later, Melinda surprised Guyman's two kids with handmade crossword puzzles, complete with clues, drawn on the back of restaurant place mats. “She just thought they'd find it fun,” says Guyman, who first met Melinda Gates roughly ten years earlier, when they were both still working at Microsoft Corp.

These days the lesser-known Gates, 35, is doing more for children than just creating crossword puzzles. The wife of the world's richest man sits atop the world's second-richest and potentially most powerful philanthropic organization: the Bill & Melinda Gates Foundation. With more than \$17 billion in the foundation's bank, she is targeting causes that mirror her own passions: im-

proving health care and education for children around the world. “Melinda exults in being in a position to help,” says William H. Gates Sr., her father-in-law and co-chair of the foundation. And she shapes the final product in a way that is “close to her vision of the society should be,” he says. **LAUNCH.** Melinda, along with her husband, has set an overriding goal for the foundation: to help bridge the gap between the haves and the have-nots. The Gateses, for example, wanted to find a way to boost the number of minority members going to college. After meeting with the heads of such groups as the United Negro College Fund, they formed the \$1 billion Gates Millennium Scholars Program, launched on Sept. 16. The goal: to ensure the best and brightest

students can attend any college they qualify for, regardless of cost.

At a press conference announcing the program, Melinda recalled how her father made sacrifices to send her to college. “If you looked around our house you'd know it wasn't going to be easy,” she recalled.

The recent spate of giving by the Gates Foundation, however, does so at an opportune time for her husband. For years, William H. Gates III was under fire for not giving more to charity, particularly as his wealth rose to staggering levels. Now, with Microsoft locked in a bitter battle with the government in an antitrust lawsuit, the Gateses are finally showing the

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largesse, offering the public a kinder, gentler image of the aggressive founder of Microsoft.

Whatever the impetus, the foundation is giving money away these days at a furious pace—requiring a big commitment on Melinda's part. An intensely private woman, she works at the Seattle foundation at least a day a week, spending the rest of her time with her two small children, Jennifer, 3, and Rory, 4 months. (She declined to be interviewed for this story.) She leaves the day-to-day task of managing the organization to the co-chairs: Bill Gates Sr. and Patti Stonesifer, a longtime friend and Microsoft co-worker. Melinda's involvement often comes in the beginning and end of the process. She and her husband will select a field where they think they can make a difference and will ask the foundation to come up with options. The couple then sifts through the final two or three proposals and makes a decision.

The foundation is already one of the major contributors to vaccine programs around the world. That came about after Melinda and Bill read an article in *The New York Times* about the lack of vaccinations in developing countries, which confirmed what the couple had seen for themselves during their travels overseas. Gates Sr. spent nearly a year researching the issue. As a result, in the past 10 months, the foundation has given away more than \$175 million to help support such projects as the creation of a malaria vaccine, an AIDS vaccine, and a program to speed the distribution of vaccines to children in the world's developing countries.

LARGE SCALE. More recently, the foundation is exploring ways to make donations to improve education for children in grade school through high school. "Bill and Melinda are looking at ways that they can make an immediate and complete impact on something.... They want to make a difference," says Stonesifer.

Not all of the foundation's philanthropic work is on such a large scale. On a regular basis, the foundation gives to small, local groups such as Books for Kids or Northwest's Child, reflecting Melinda's desire to help improve educational prospects for struggling kids. In some cases, the donations are the di-

rect result of the experiences and interests of the Gates family. The foundation has given \$12 million to the University of Washington's law school, for example, where Bill Gates's father got his law degree, and \$20 million to Duke University, where Melinda studied and where she now serves as trustee. And a local school in Seattle where

hood Federation of America Inc., initiatives are a small part of the foundation's overall donations. Further, the funds are earmarked for very specific purposes, such as a teenageline and Web site, projects that have nothing to do with providing abortion. "Obviously I can't speak for what Melinda Gates believes," says Gloria M. Neupert, president of Planned Parenthood. "But I do know that there is a practicing Catholic there is a desire on her part to respect the teachings of the Church."

SMARTS. The foundation is the only outside claimant of Melinda Gates's time. Beyond her work as a Duke trustee, she is also co-chair of a Washington State commission on early learning. She has joined the board of a home Internet startup, drugstore.com, at the request of CEO Bill M. Neupert, who also works

GATES'S GIFTS

With \$17 billion at her disposal, Melinda Gates now helps guide one of the world's largest philanthropies, targeting education and health programs for the poor. A sampling:

GATES LIBRARY INITIATIVE \$200 million gift to wire libraries for the Internet in low-income communities

THE BILL & MELINDA GATES VACCINE PROGRAM \$100 million to speed up the vaccination of needy children around the world

THE MATERNAL MORTALITY REDUCTION PROGRAM \$50 million grant to Columbia University's School of Public Health to prevent pregnancy-related deaths in the developing world

THE MALARIA VACCINE INITIATIVE \$50 million to research and develop a malaria vaccine

THE INTERNATIONAL AIDS VACCINE INITIATIVE \$25 million in funding for an AIDS vaccine

DATA: THE BILL & MELINDA GATES FOUNDATION

Melinda volunteered her time for years has recently received a grant of \$200,000 to help refurbish its facilities.

Melinda's interests and beliefs were influenced by growing up with two brothers and a sister in a North Dallas suburb in the 1960s and 1970s. The Frenches taught their kids that no door was closed to them, provided they worked hard. Raised a Roman Catholic and educated at a girls' Catholic high school, Melinda was encouraged to pursue her love of science and math. She graduated in 1982 as valedictorian of her class and then spent five years at Duke, where she earned undergraduate degrees in computer science and engineering, as well as an MBA. Arriving at Microsoft in 1987, she spent the next nine years working as a product manager.

Those early experiences clearly have helped shape Melinda's and the foundation's giving. For example, while the foundation donates to a few family planning groups, including Planned Parent-



FAMILY FIRST: Both stress privacy for their kids

with her at Microsoft. He says he would not have married her because of her smarts and decision-making skills.

If anything, Gates is cautious about becoming overextended, and she famously limits her brushes with publicity. She has made it clear that her first priority is her family, and that means protecting family privacy. Since marrying Gates in 1994, she has turned down interview requests from the media. "I make efforts to make the home front as 'normal' as possible as what her husband praises the most. 'One thing Melinda has been great about is thinking how we can maintain some privacy for our family—particularly her and our children,'" says Gates. "Since retiring from Microsoft, Melinda has made it clear she is not a public person. We have to be black and white on this."

Although Melinda is clearly busy with her family and foundation alike, she nevertheless manages to squeeze in so-

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hobbies. Jogging, climbing Mt. Rainier, and enjoying "girls' nights" out once a month with former Microsoft colleagues are wedged into her busy schedule. And if you're a really close pal, there may even be a crossword puzzle designed just for you.

*By Michael Moeller
in Seattle*

CHARITY, THE BUFFETT WAY

The billionaire investor has a unique approach to giving

Warren E. Buffett, the legendary investor, built one of America's great fortunes by defying convention. His plans for giving his money away are, if anything, even more contrarian. To date, the Buffett Foundation has received only a sliver of Buffett's wealth and yet already it ranks among the staunchest benefactors of politically beleaguered not-for-profit abortion providers. What's more, if all goes as Buffett envisions, virtually his entire net worth—\$30 billion at present—one day will go not to his three children but to his former son-in-law, Allen Greenberg.

Yes, that's former son-in-law. Greenberg and Susan A. Buffett, Warren's only daughter, were divorced in 1995 after 12 years of marriage. Greenberg, 42, will come into the Buffett billions not as a personal heir but as executive director of the Buffett Foundation. Even so, America's third-richest man surely must rank among history's most forgiving fathers-in-law. "I've given no thought at all to replacing Allen since he and my daughter divorced," says Buffett, chairman of Berkshire Hathaway Inc. "I think he is the best per-

son in the U.S. to run the foundation."

Like his good friend William H. Gates III, Buffett believes that his money ultimately should benefit society rather than enrich his relatives. But unlike the Microsoft Corp. mogul, Buffett, 69, is in no hurry to start giving away big chunks of his fortune, which is almost entirely tied up in Berkshire stock. He owns 35.6% of the company, while his wife, Susan T. Buffett, owns 2.8%. The Buffetts have funded their foundation mainly out of an innovative shareholder-directed corporate giving program that Berkshire established in 1981. The company contributed \$7.7 million to the Buffett Foundation in 1998.

With just \$22 million in assets, the Buffett Foundation ranked 1,715th among U.S. foundations in 1998, according to the Foundation Center, a nonprofit group that monitors philanthropy. However, the Buffett family's entire stake in Berkshire will likely pass to the foundation upon Warren's death or that of his wife, whichever occurs last. At today's valuations, the Buffett Foundation would be the best-endowed foundation in the country, outranking Gates, Packard, Ford, and Lilly.



The Buffett Foundation was set up in 1964 but had no director until Greenberg took the job in 1987 at the invitation of his father-in-law. Greenberg, born and raised in New York where his father owned a newspaper distribution business. After graduating from New York University Law School, he embarked on a career in public interest law and worked as a legislative aide to Representative Charles Schumer (D-N. Y.), who is now a senator. Greenberg and Susie Buffett met in Washington, and married in 1983. The marriage delighted Susie's parents, who were calling the earnest, mild-mannered Greenberg "Allen-the-perfect-son-in-law."

Aside from a part-time secretary,



Greenberg maintains the foundation's employee salary at \$120,000. He works out of an office on a dozen floors. The low Buffett-owned top digs in an aha mid-Buffett raises involves himself in fund decisions,

Greenberg does collaborate closely with his former mother-in-law, who is the foundation's president. Further complicating the decidedly family dynamic, Buffett lives in San Francisco, having moved to Omaha when she and Warren separated in 1977. By all accounts, and her husband remain on excellent terms. They have no plans to divorce.

The Buffett Foundation has had an impact on society that rivaled that of much larger organizations, mainly because it concentrates giving in two closely related fields: population control and reproductive health. This emphasis is rooted in the deeply held

FAMILY WAY: Buffett's wife, Susan, works closely with former son-in-law Greenberg

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beliefs of Mr. and Mrs. Buffett, neither of whom is inclined to air their views in public. "Certainly I consider population and reproductive rights to be important issues . . . but I don't want to comment on the question or become a spokesman," Buffett said in 1997. "It would change my life too much."

LOCAL LEVEL. The Buffett Foundation is unusual in that it does not parcel money out to grant applicants. Instead, it prefers to seek out worthy recipients on its own. In his 12 years on the job, Greenberg has won a reputation as a vigilant and decisive administrator. "It's amazing how much Allen knows," says Gloria Feldt, president of Planned Parenthood Federation of America. "He really has mastered the operational details in a way that most funders never do."

Of the \$17.6 million that the Buffett Foundation donated in the fiscal year ended June 30, nearly \$3.8 million went to Planned Parenthood. This ranked the foundation among the federation's top three contributors. But what truly sets the Buffett Foundation apart is that it involves itself directly at the clinic level by making project grants to local affiliates across the country—17 of them this year alone. Over the years, Buffett mon-

FAMILY MATTERS

With just \$22 million in assets, the Buffett foundation is small. But thanks to carefully targeted grants like those below made last year, it has had an outsized influence in its chosen areas of family planning and population control.

PLANNED PARENTHOOD* \$3.76 million to fund family-planning clinics

INTERNATIONAL PROJECTS ASSISTANCE SERVICES \$2.5 million to fund abortion devices in Third World countries

POPULATION COUNCIL \$2.43 million for research on population issues

PATHFINDER INTERNATIONAL \$1.24 million to fund family-planning projects abroad, mainly in Vietnam

NATIONAL ABORTION RIGHTS ACTION LEAGUE \$1 million to finance pro-choice lobbying group

*Includes a \$648,089 donation to the Planned Parenthood Federation and grants to 17 affiliates around the U.S. DATA: THE BUFFETT FOUNDATION

ey has enabled dozens of Planned Parenthood clinics to add abortion to their panoply of services.

International Projects Assistance Services (IPAS) is even more dependent on Buffett support. Based in Carrboro, N.C., IPAS manufactures a handheld suction pump used in developing countries to initiate abortions and to save the lives of women bleeding from botched, self-performed procedures. The Buffett Foundation has backed IPAS for years,

but it recently agreed to step up giving dramatically. Its 1999 contribution of \$2.5 million is part of a five-year, \$12.5 million commitment that will enable it to double its capacity.

In an interview with BUSINESS WEEK, Buffett indicated a new willingness to make a large, direct gift to the foundation before his death. "If my wife and I had projects they felt were tenable right now, I would consider it," Buffett says. Indeed, the foundation





ON THE MARCH:
*Protesters picket
Berkshire's annual
meeting in Omaha*

ual giving has risen of late
a level that may soon force
issue. The \$17.6 million in
nations made in fiscal 1999
presented a 41% increase
er the previous year. If Greenberg
aintains this pace, the existing en-
owment might well be exhausted with-
a year.

But even if Buffett were persuaded
ratchet up his annual giving above
\$25 million or even the \$100 mil-

lion mark, the time will come
when Greenberg will have to
operate on an incomparably
larger scale. By law, a foun-
dation is required to give
away at least 5% of its endowment
every year. Even if the Buffetts were to
leave an estate no larger than it is to-
day, Greenberg would have to distribute
a staggering \$1.8 billion a year.

Greenberg would not be quoted for
this article, but has told friends that he

tries not to dwell on the future lest he
become "paralyzed with fear." No one
seems to doubt Greenberg's passion or
resolve. "Allen has a real commitment
to doing Warren's work," says Peter
Donaldson, who worked with Greenberg
on a major family-planning project in
Vietnam and now is president of the
Population Reference Bureau. But he
will have to prove that running a one-
person shop has prepared him for the
rigors of building a large organization,
and that he possesses the ingenuity nec-
essary to expand the scope of the foun-
dation's giving while remaining true to
the beliefs of the Buffetts.

Greenberg is probably also going to
have to develop a thick skin. Aside from
the few anti-abortion protesters that
picket Berkshire's annual meeting every
year, the Buffetts have succeeded in re-
maining above the political strife that
envelops the abortion issue. But Warren
believes that the process of disbursing
his fortune will generate a lot more heat
than making it did. "It's going to take
guts," Buffett says. "They don't neces-
sarily look that way, but you couldn't
pick two people who have more guts
than my wife and Allen."

By Anthony Bianco in Omaha

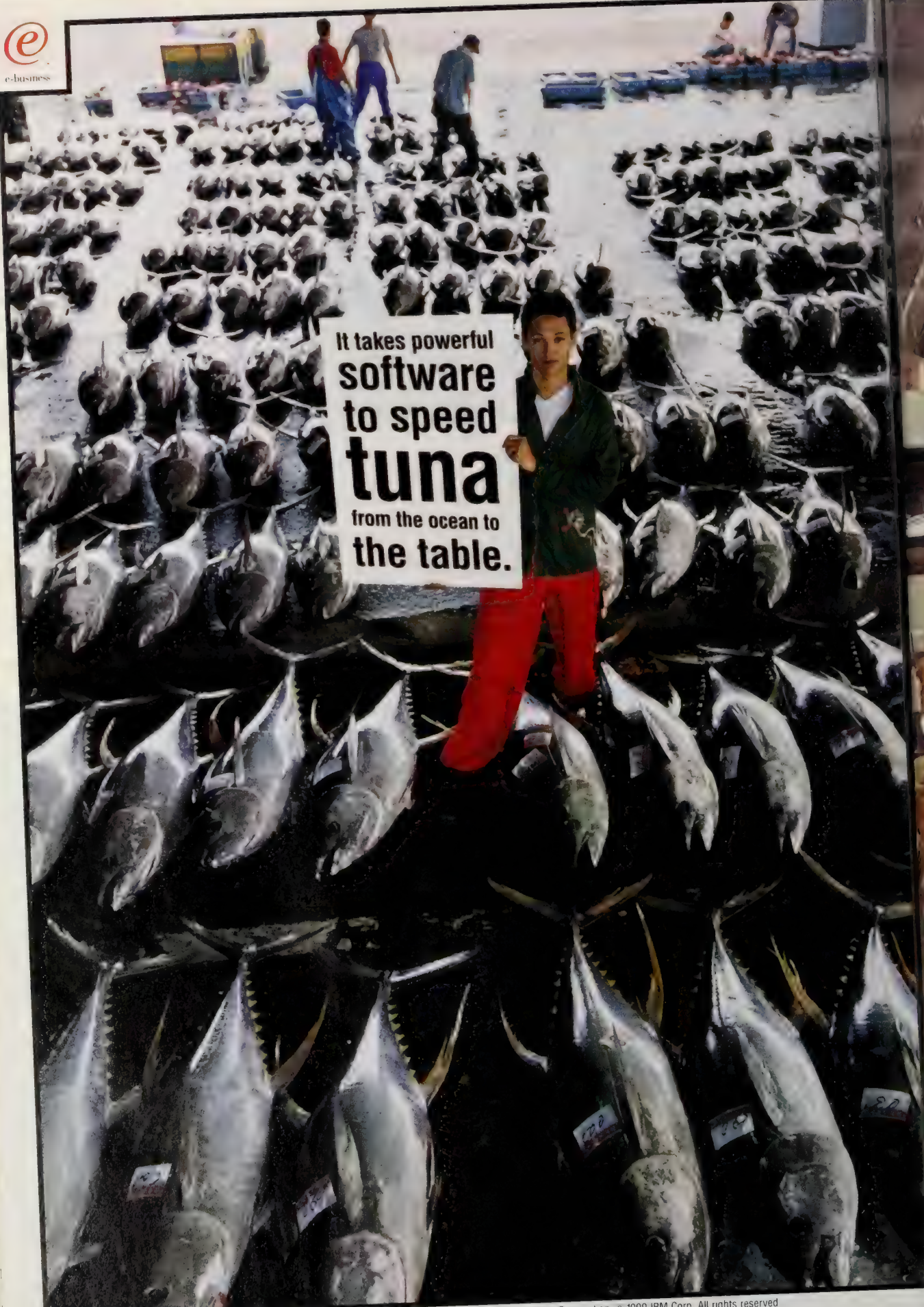
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BIOLOGY

THE GREAT DNA CHIP DERBY

Companies are racing to build them faster and cheaper

In a small room in the University of Wisconsin's Biotechnology Center in Madison, graduate student Roland D. Green peers down at an array of thousands of tiny mirrors protected by a stainless-steel frame. A DNA synthesizer, a beige box roughly the size of a microwave oven, is tethered to the array by a tangled mess of wires and tubing. The whole system is controlled by a desktop computer. This crudely assembled hodgepodge is an example of a new technology that will revolutionize molecular biology in the next decade or two. The machine makes DNA chips that will do for biology what microprocessors did for computers.

DNA chips are thin wafers of glass or plastic with thousands of microscopic bits of DNA arrayed on their surfaces. Scientists are already using them to identify disease genes and to help speed drug discovery. Soon, DNA chips will allow personalized medicine—the rapid design of custom therapies based on an individual patient's genetic makeup.

For now, the clear leader in DNA chips is Affymetrix Inc. in Santa Clara,

Calif. More than 80 major companies, including Glaxo Wellcome, Pioneer Hi-Bred International, and Pfizer, are using Affymetrix' chips in their research. But it may not remain the leader forever.

In the past few years, about a dozen companies have jumped into the business, each hoping to become the Intel of DNA chips. The new entrants are experimenting with digital technology, ink-jet printing, and even fiber optics to devise faster and cheaper ways to make DNA chips. If the research pans out, DNA chipmaking machines may soon rest on every bench in every research lab in the country. Stephen H. Friend, a geneticist at Fred Hutchinson Cancer Research Center in Seattle, Wash., foresees an enormous impact: "It will open up biology. It will be like the transition from mainframe computers to PCs."

Not everybody believes these second-generation chips can compete with Affymetrix. Analysts contend that Affymetrix, with its strong patent position and manufacturing capabilities, will remain a leader in the business for some time to come. "They are the only ones

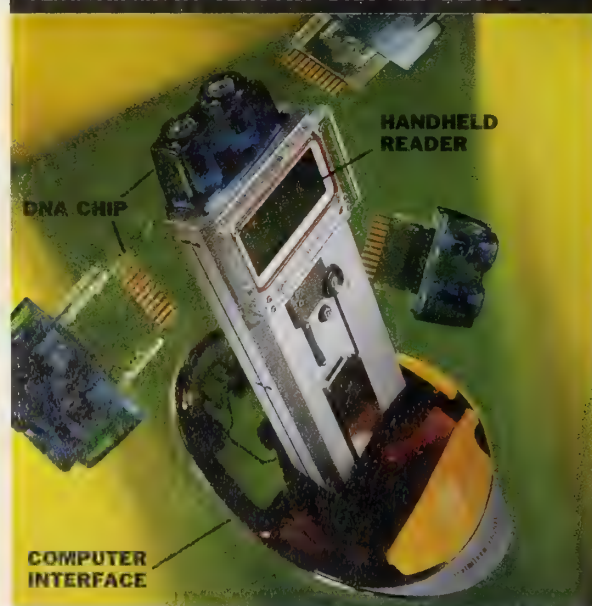
that have demonstrated reproducible results," says Michael G. King Jr. of BancBoston Robertson Stephens. But that could change. "It may be several years before we have definitive answers about where this field is going, but it's clear that a revolution is underway," says A. Paul Boni, an analyst at Punk, Ziegel & Co. And Affymetrix "won't be the only player."

Just how large is this potential market? Big enough that Motorola Inc., Hewlett-Packard Co. are hoping to transfer their expertise in silicon computer chips to DNA. Surveys by brokerage houses and market-research firms indicate an immediate market of about \$1 billion—with room to expand to \$1 billion in the next decade.

PRICEY. Affymetrix builds its chips using photolithography, a process used in the semiconductor industry to etch silicon computer chips. But the process is time-consuming and expensive. At present, off-the-shelf chips cost anywhere from \$90 to \$2,500. And the GeneChip instrument System, which includes a machine to deliver the samples to the chip and an instrument to read and analyze the results, is even more expensive. The entire system runs just under \$200,000, according to Anne M. Bowdidge, Affymetrix' associate manager for investor relations. This means that, at present, GeneChip technology is too expensive for all but the most high-powered research facilities. "It takes hundreds of thousands of dollars just to get into the game," says Joseph L. DeRisi, a molecular biologist at the University of California at San Francisco.

Such costs have spurred research

CLINICAL MICRO SENSORS' DNA CHIP DEVICE



Biochip Contenders

For now, Affymetrix in Santa Clara, Calif., is the premier DNA chipmaker. But other companies are rushing into the fray.

CLINICAL MICRO SENSORS Pasadena, Calif.	Handheld DNA chips that are used to diagnose disease
ACLARA BIOSCIENCES Mountain View, Calif.	Lab-on-a-chip devices that can both process and analyze biological material
HYSEQ Sunnyvale, Calif.	Universal arrays that can be used to decode DNA
ILLUMINA San Diego	Biochips made from fiber-optic bundles that can hold DNA, proteins, or small molecules
NANOGEN San Diego	Semiconductor-like biochips that can be used to diagnose disease
NIMBLEGEN Madison, Wis.	Cheaper DNA chips that utilize digital technology developed by Texas Instruments



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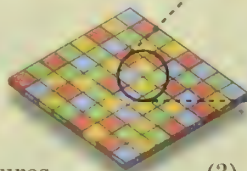
DEAD-ON DIAGNOSIS

DNA chips can be thought of as dime-size glass or plastic checkerboards that contain a varying number of tiny squares or features (1). Eventually, there will be chips dense enough to hold millions of data points. Right now, some

contain just 10 or 20 features but others contain hundreds of thousands. Each one holds millions of copies of a specific piece of DNA that acts like a tag. It corresponds to a particular gene or piece of a gene in the biological sample being tested.

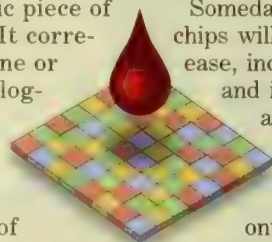
For instance, when a drop of blood is spread over the chip's surface (2), a certain proportion of these DNA tags will grab on to their counterparts in the sample. This process is called hybridization, and it happens fast—in minutes or seconds. Various

schemes are used to detect when a match has occurred. Scientists might use electric signals or add a fluorescent dye to the sample. In the latter case, when the chip is scanned under laser light, the squares containing matches will glow a brilliant color



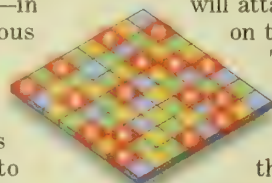
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(3). Scanners can read this multicolored data array with exquisite precision.



2

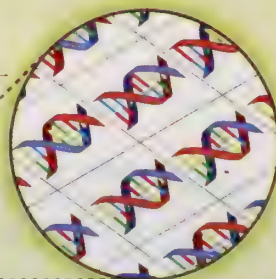
Someday, say scientists, DNA chips will be used to diagnose disease, including bacterial infections and inherited disorders. To diagnose the cause of an infection, a physician would simply drop a tiny amount of blood



3

onto a custom chip that contains bits of DNA from 10 or so different bacteria. DNA from the infectious agent, which is in the blood, will attach specifically to its mate on the chip and to no others.

That means that only one square—a square diagnostic for that particular germ—would light up on the chip. In a matter of minutes, the doctor would know the precise strain causing the patient's infection and be able to prescribe the appropriate antibiotic.



is putting the finishing touches on a microelectronic chip that utilizes electricity to attach DNA molecules to its surface. The result is a simpler, more robust manufacturing process that could prove to be less expensive.

Analysts predict the big market for DNA chips will be in diagnosing disease. For that to happen, chip costs must come way down. "You aren't going to use them if it costs a hundred bucks per test," says Jon F. Kayyem, president and CEO of Clinical Micro Sensors. His company has developed a DNA chip that downloads results into a handheld reader that runs off a nine-volt battery. Clinical Micro Sensors' DNA chip, which costs about \$10, is sensitive enough to detect a signal from DNA contained in waste water, blood, even sludge. Kayyem envisions a day when doctors will use low-cost DNA chips, not throat swabs, to diagnose a child's infection. Because throat-culture swabs have to be sent to a lab for testing, it can take a day for physicians to get results, so they are left prescribing antibiotics without knowing whether or not they will be effective. An instant diagnostic scan that identifies not only the infectious agent but whether or not it is resistant to common drug treatments would be a vast improvement, says Kayyem.

WORKHORSES. DNA chips need to receive regulatory approval from the Food and Drug Administration before their use in diagnostics becomes routine. Right now, the market for DNA chips is in genetic and pharmaceutical research, where they can be used to sift through thousands of genes to pinpoint the particular few that are turned on during disease.

Affymetrix, with its ability to manufacture high-quality DNA chips, excels in this kind of market. Stephen P.A. Fodor, the company's president, doesn't perceive a threat from his competitors. "We are making tens of thousands of chips a year. We market them, and people buy them," he says. That may be true, but Affymetrix recently acquired Gene MicroSystems Inc. in Woburn, Mass., which uses ink-jet printing to make cheaper DNA chips.

Scientists and analysts alike caution that it's impossible to tell which method—photolithography or digital optics—will ultimately be used to manufacture DNA chips. "DNA chips are only at the beginning of their evolution," says William Efcavitch, director of PE Applied Biosystems' DNA chip division. "You can bet there isn't going to be just one technology."

By Ellen Licking in New York

to find cheaper alternatives. The University of Wisconsin's Green, together with his professors Franco Cerrina and Michael R. Sussman, have devised a way to make DNA chips that doesn't require Affymetrix' expensive chromium photomasks. They use tiny micromirrors, originally developed at Texas Instruments Inc. for use in overhead projection and digital television. By deftly manipulating these tiny mirrors, Green and his colleagues can put more than 300,000 bits of DNA onto a chip in just eight hours. Best of all, the chips appear to work as well as the ones already on the market. In a recent *Nature Biotechnology* paper, the group showed that it used the chip to detect mutations in the genes of a mustard plant. They recently formed NimbleGen to commercialize their new technology.

As NimbleGen begins to optimize its manufacturing process, other startups are experimenting with ink-jet print-

ing, using high-speed robotic devices to print DNA on tiny squares of glass. These so-called "homegrown arrays" are cheap enough that even academic laboratories can afford them. As a Stanford University graduate student, UCSF's DeRisi built a machine he calls an "arrayer" from off-the-shelf parts. According to DeRisi, his gene-hunting robot is simple enough to be assembled in a single weekend. Since moving to UCSF, DeRisi has been using the arrayer to make chips that contain as many as 32,000 DNA molecules. Meanwhile, his Stanford colleagues, led by Patrick O. Brown, are using the machine to decode the genetic blueprint of yeast.

Companies such as Illumina, Nanogen, and Clinical Micro Sensors are also trying to develop low-cost ways to make DNA chips. San Diego's Illumina is using fiber-optic bundles to build chips capable of holding 50,000 different DNA fragments. Nanogen Inc., also in San Diego,

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EDITED BY CATHERINE ARNST



ATHERED FRIENDS OF STUTTERERS

STUTTERING IS A HEART-breaking condition, with no simple treatment. Although 1% of adults and 4% of children in every culture stutter—including 3 million children in the U.S.—little is known about its cause. But researchers at Houston's Baylor College of Medicine have found a key tool for solving the problem: an animal model of stuttering. They note that some zebra finches abnormally repeat notes, an avian equivalent of human stuttering. After decades of study, researchers have concluded that stuttering is not, as was once thought, a psychological problem. Rather, it results from a breakdown in the speech control system: Stutterers know what they want to say but can't say it. There is a growing belief that a brain abnormality may explain the breakdown, but no animal models existed to study the condition—until the finch. The brain pathways it uses to learn its song are similar to those humans use to learn speech. "We have observed that a small number of normally raised zebra finches repeat syllables of the song," said Dr. David B. Rosenfield, neurologist at Baylor who reported the findings at the recent American Neurological Assn. meeting in Seattle. Researchers hope the finch will help them find out if there is a genetic component to stuttering and if the disorder is treatable with drugs.

ACID RAIN: BAD NEWS ABOUT THE GOOD NEWS

SINCE THE PASSAGE OF THE national Clean Air Act of 1970 in the U.S. and similar laws in Canada, acid rain levels have fallen dramatically across large portions of North America. But the decline hasn't meant a return to health for lakes and streams in large swaths of North America. In fact, an international research team has discovered that lakes in some regions have actually continued to acidify in the '90s.

Scientists define recovery of a lake as a return to its pre-industrial acidity levels. In the Oct. 11 issue of *Nature* and in a draft report for the Environmental Protection Agency, the researchers say that from 1980 to 1995, surface waters had not recovered in South and Central Ontario, the Adirondack and Catskill Mountain region, the Great Lakes area, and the region spanning Vermont and

Quebec—coincidentally, the regions with the largest decreases in industrial emissions. By contrast, they found a far greater rate of recovery during the same period in European lakes. "It was pretty unexpected," says Steve Kahl, director of the Water Research Institute in Orono, Me., and lead author of the report. "We thought the lakes were recovering in the '80s, but the trend seems to have reversed itself in the '90s." Kahl says the reversal could be the result of continued high levels of



TRoubled WATERS: A Maine lake

nitric acid carried by rain, the effects of recent droughts, and the depletion of naturally occurring acid-neutralizing chemicals in rocks and soil, possibly the result of decades of acid rain. □

AN ELEPHANT'S MEMORY IN A TINY SPACE

DICK TRACY'S COMMUNICATING WRISTWATCH MAY BE closer to reality, thanks to IBM's Millipede data-storage technology. This ultrasmall approach to computer memories, being developed at the IBM Research Div. in Zurich, can pack a 3-by-3 millimeter square—the size of an "m" on this page—with a gigabyte of data, or 1 billion letters and numbers. That's 20 times the amount that can be stored magnetically in the same space. Such enormous, yet tiny, memory devices will be needed to fulfill the Internet's promise of "ubiquitous computing," says Gerd K. Binnig, a co-director of Millipede research. To Net surf from anywhere, Binnig says, people "will need something on their body—and almost everyone has a watch."

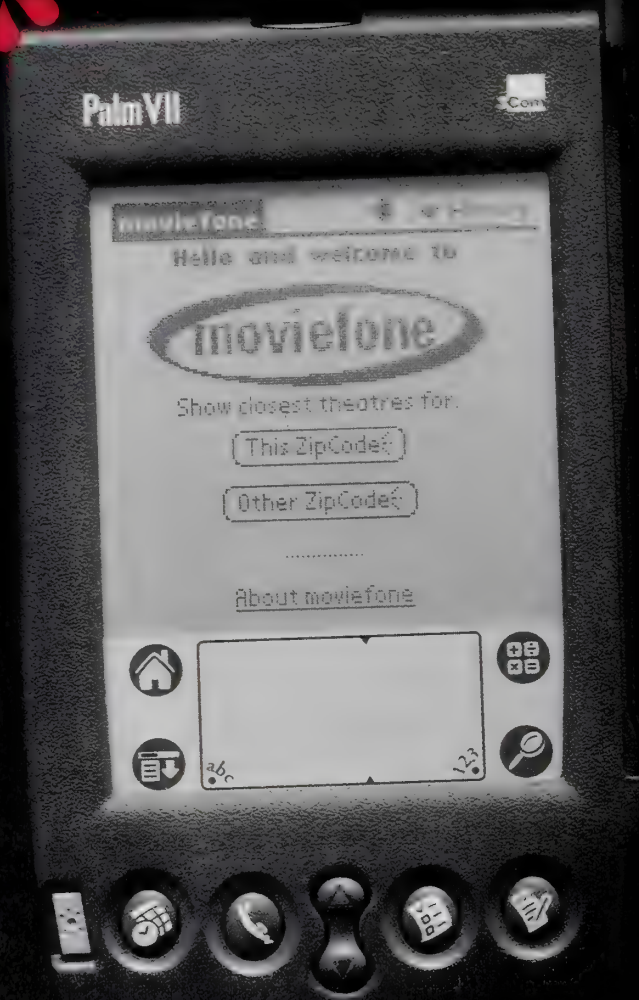
The Millipede project gets its name from the 1,024 tiny tips mounted on a v-shaped cantilever. To write data, a selected tip is instantly heated enough to melt a pit in a plastic substrate. Bits are retrieved when a warm tip moves over a pit. The air in the pit cools the tip slightly, enough to detect the change. Gigabyte memories are just for starters, says Binnig. IBM already has a Millipede prototype that can store 1,000 times more—a terabyte of data.

Otis Port

INNOVATIONS

■ E-mailers will soon gain awesome power over the messages they create and transmit across the Net. Software from privately held startup Disappearing Inc. could become the electronic equivalent of a remote paper shredder. Message senders will be able to post encrypted e-mail that the recipient can open only by means of special keys. The neat part is, the sender can program the keys to last just a certain number of minutes, weeks, or months. When the key expires, the recipient will no longer be able to open the message. Software from rival startup qvtech goes further, allowing the sender to specify how the message is used. In addition to dictating how long the message will remain in the recipient's mailbox, e-mailers can arrange it so that their messages cannot be forwarded outside a corporate intranet, or to certain destinations. They can even prevent the recipient from copying, pasting, or printing the contents of the message, according to qvtech.

■ Think about the stacks of educational programs that engaged your child for only one short weekend. In an ideal world, you'd rent these programs, saving money and shelf space. Starting Oct. 15, Arepa.com of Cambridge, Mass., is giving that option to New Jersey subscribers of cable-modem services run by Comcast and Excite@Home. For about \$3, customers who log on to Arepa's PlayNow site can run hot new programs as often and as long as they choose over a 48-hour period. Since subscribers will be playing remotely, the software won't mess up graphics settings on their personal computers. Arepa may also offer extended leasing—say, \$10 for one month's access to a particular category of software. *Neil Gross*





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COMMENTARY

By Joann Muller

THE AUTO TALKS: WHO REALLY WON



SPIN-OFF PROTEST

As part of Detroit's generous new labor pact, auto-parts workers at Visteon will continue to get Ford pay and benefits

It looked like a clear case of highway robbery. The United Auto Workers reached into the pockets of Detroit's Big Three carmakers during recently completed national contract talks and drove off with the richest terms in two decades. By the time the new pacts expire four years from now, the 370,000 UAW members at the Big Three will be raking in \$25 an hour, up 25% from today—plus a nice bonus and richer benefits. The union even forced auto makers to cough up expensive wage and benefit guarantees for workers affected by their parts units' spin-offs. Overall, the average worker will receive some \$30,000 in added wages and benefits.

But nobody blinked an eye, not even Big Three shareholders or inflation-wary Wall Street economists. For while Detroit might appear to be a holdup victim, in fact the UAW's winnings—of 3% annual pay hikes—are less than the 4% that union workers have won at Boeing, AT&T,

and elsewhere. Auto makers also grabbed some goodies of their own that will more than pay for all the dollars they are doling out. Chief among them: the freedom to restructure their workforces and boost efficiency. This is particularly important for General Motors Corp., which trails other carmakers in productivity. And new job-security language, which for the first time prescribes the formula for replacing retirees, has enough wiggle room to allow GM to cut its still-bloated workforce by about 20%—a huge accomplishment for the No. 1 U.S. auto maker.

SHAKY PROGRESS. Equally important, Detroit was able to buy labor peace at a time when it couldn't afford a confrontation. DaimlerChrysler, which the union targeted first, didn't want a strike to disrupt its already shaky merger progress, especially since 60% of its profits come from its U.S. factories. GM was desperate to turn over a new leaf with labor—following a devastating

54-day strike in 1998 and the divisive spin-off of its Delphi Automotive Systems auto-parts unit earlier this year. Even Ford Motor Co., which in recent weeks faced the biggest risk of a strike over plans to sell its Visteon Automotive Systems parts unit, managed to keep the peace. It agreed to guarantee jobs and pay levels of Visteon workers for life.

The relative ease of the auto industry's national labor talks this year reflects a pragmatism on both sides. When negotiations began in June, the union had two major objectives: It intended to grab a larger share of Big Three profits. And union leaders were eager to expand the UAW's share of auto industry employment by getting the manufacturers to demand that suppliers not resist efforts to sign up their workers. As part of this strategy, the UAW hoped to prod DaimlerChrysler to let in the union at its Mercedes plant in Alabama.

Yet when it came time to deal, UAW President Stephen P. Yokich

I will get to the source.

not statistics.

I will shed light.

I will look.

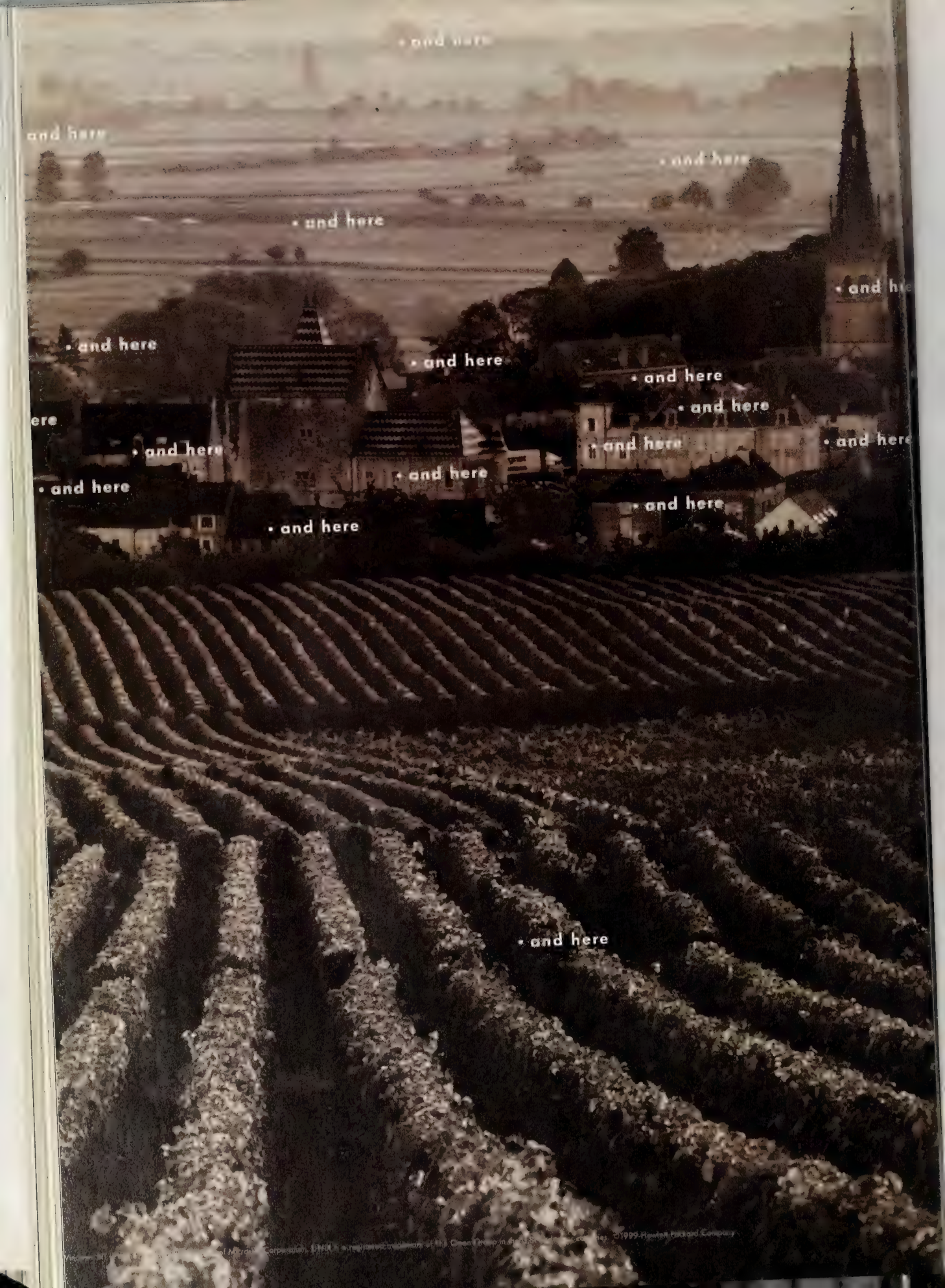
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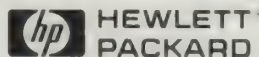
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DETROIT POKER: HOW THEY SPLIT UP THE POT



Won a 25% hike in pay and benefits over four years, but failed to stem the erosion of union jobs in the auto industry.



Paid through the nose to achieve labor peace but retained the flexibility to slash its workforce by 20% through attrition.

DAIMLERCHRYSLER

Agreed to give the UAW easier access to nonunion plants but refused to forgo a contentious election at its Mercedes-plant in Alabama.



Guaranteed that workers at its Visteon parts unit will be paid Ford-level wages and benefits until retirement, even after it is spun off.

DELPHI Automotive Systems

GM's former parts unit got its own UAW contract but agreed to match GM's expensive wage and benefits scale for eight years.

swapped the future strength of the union for fatter paychecks for current members. With U.S. auto sales on track to exceed a record 17 million units this year, the UAW's leverage was at a peak. Yokich decided to take the money and run, says Michigan State University labor professor Dale G. Brickner. He says union members "felt they better claim some of this now or they might not see it again."

In exchange, though, Yokich largely gave up on demands for help on union organizing. Instead, he settled for weaker language that encourages auto makers to tell their suppliers not to threaten job cuts during UAW recruitment drives. Yokich also backed off a threat to strike DaimlerChrysler over Mercedes' resistance to unionization at its Alabama plant. The UAW did win the right to have recruiters meet with employees inside the facility during non-work hours. But it failed to get its key demand: that Mercedes voluntarily recognize the union without an election if more than 50% of workers signed cards saying they wanted the union.

DIGGING DEEP. Auto makers, too, faced facts as they wrapped up the smoothest round of national bargaining in years. The industry is awash in record profits, thanks to boffo truck sales and improvements in manufacturing methods. So the Big Three were prepared to pay through the nose this time around. GM and Ford, in particular, knew that they would have to dig deep to assuage the union's fears over the spin-offs of their parts units.

And they did. GM agreed to give Delphi workers until Jan. 1 to retire with a GM pension. And employees won the right to apply for GM openings when they occur. GM also guaranteed many benefits for Delphi workers if its ex-parts unit encounters "financial distress" in the next eight years. Meanwhile, Delphi matched GM's contract terms for the new pact plus four more years.

Ford went even further to avoid a showdown over its planned Visteon spin-off or sale. It guaranteed that

in the national contract can be bent—or even ignored—in plant-level negotiations, analysts say. Under the 1996 national contract agreement, GM was nominally required to hire one new worker for every two who left. But many local union leaders agreed not to enforce the language in order to keep their plant competitive or attract new investment.

DUTY TO HIRE. True, the new job-security provisions in this year's contracts are tougher than previous pacts. The new contracts for the first

time prescribe the rates at which auto makers must hire new workers if employment sinks below certain levels, no matter what the reason. There is one important exception: If jobs are lost because of market-driven reductions in sales volumes, the new-hire obligations don't apply. That could be crucial for GM, whose market share has been shrinking steadily. "Closing facilities will be difficult, but not impossible," says Morgan Stanley



AGREED: Yokich left GM's Smith wiggle room to cut jobs

current Visteon employees would receive Ford paychecks and other Ford-paid benefits until they retire, even after Visteon becomes independent. In effect, Ford agreed to lease its employees to Visteon. That was vital to Visteon workers, who didn't want to give up their lucrative Ford benefits. Ford also agreed that after the spin-off, all Visteon employees hired in the next three contract periods, up to 12 years, would earn the same pay as Ford workers for life.

The auto makers agreed to such seemingly rich promises because they have learned that most of the job-security measures they agree to

Dean Witter analyst Stephen J. Girsky. Overall, GM officials say they can cut the union's ranks by 20%, to about 115,000. The contract "requires us to be more creative, but I'm happy as punch," says GM CEO John F. Smith Jr.

The biggest win for GM may be a new era in labor peace. And after potential flare-ups, DaimlerChrysler and Ford, too, have preserved a delicate balance with labor. With the industry chugging along at record levels, no one wants the party to end.

Muller covers the United Auto Workers in Detroit.

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TO DAVID ERNST, THE WORLD IS JUST A WHIRL of alliances. Take a typical day for this consulting partner at McKinsey & Co. in Washington, D.C. The gas pumped into his car is the product of an alliance between Shell and Texaco Inc. Payment for the gas is thrown on a credit card co-branded by Royal/Dutch Shell Group and Mastercard. A cup of Starbucks Corp. coffee that Ernst grabs as he careens through an airport is sold through a partnership with Host Marriott. The airline that whisks Ernst to his destination is part of a grouping of several international carriers. Says Ernst, an alliance expert: "For most companies, the basis of competition has shifted to groups of companies competing against groups of companies."

Throughout the 1990s, the takeover has dominated the world of corporate finance. No longer. The defining deal for the next decade and beyond may well be the alliance, the joint venture, the partnership. The alliance boom is most prevalent in industries with rapid change. They include media, entertainment, airlines, financial services, pharmaceuticals, biotech, and high tech. Surprisingly, the number of alliances continues to grow, despite the fact that most studies point to high failure rates.

Partnerships are all about spinning a web to catch more customers, says David E. Raphael of Marcar Management Institute of America, a research firm based in Belmont, Calif. You can either create your own partnerships, or you can jump on an existing web. For instance, AOL has fueled its growth by putting itself at the center of an intricate web of alliances in all sectors of the information economy. The alliances include drkoop.com, GTE, US West, as well as Sun and Nintendo, says Raphael.

Software developers have created constellations of thousands of these relationships hooked together. Companies like Oracle have between 15,000 and 16,000 business alliances, says Larraine Segil, partner and founder of the Lared Group, based in Los Angeles, which specializes in strategic alliances. "These days, partnerships are hooking up many different kinds of organizations, multiple different types of structures, licensing, distribution, co-marketing, joint research, equity relationship, or multiple legal structures."

Management expert Peter Drucker says there is not just a merger boom but above all "a worldwide restructuring" in the shape of alliances and partnerships. According to Andersen Consulting, alliances will represent \$25 trillion to \$40 trillion

in value within five years. The firm concludes that the average large company, which had no alliances a decade ago, now has in excess of 30. As Anderson sees it, the question is no longer whether to form an alliance, but who will be the appropriate partner.

No one, even former go-it-aloners like IBM, wants to miss the action. IBM has announced \$30 billion worth of alliances since May with companies like Dell Computer Corp. and Cisco. AT&T has recently announced a slew of deals with even one from British Telecom to Microsoft. And then there's United Airlines Inc., part of a global alliance with seven other

airlines called the SkyTeam Alliance. Ever since United learned that one of its partners, Air Canada, was the target of a rival alliance, it has considered buying part of the Canadian airline just to block the deal, according to press reports.

The federal government is taking note of this global shift. On Oct. 1, the Federal Trade Commission, in consultation with the Justice Dept., issued a draft "antitrust guidelines for collaboration among competitors."

FTC Chairman Robert Pitofsky said the new guidelines would deter "collaborations likely to harm competition and consumers." But he also said he wants to "encourage pro-competitive collaborations" (page 130). The soft tone of the guidelines was a far cry from that of the big-stick trustbuster of the '80s and early '90s.

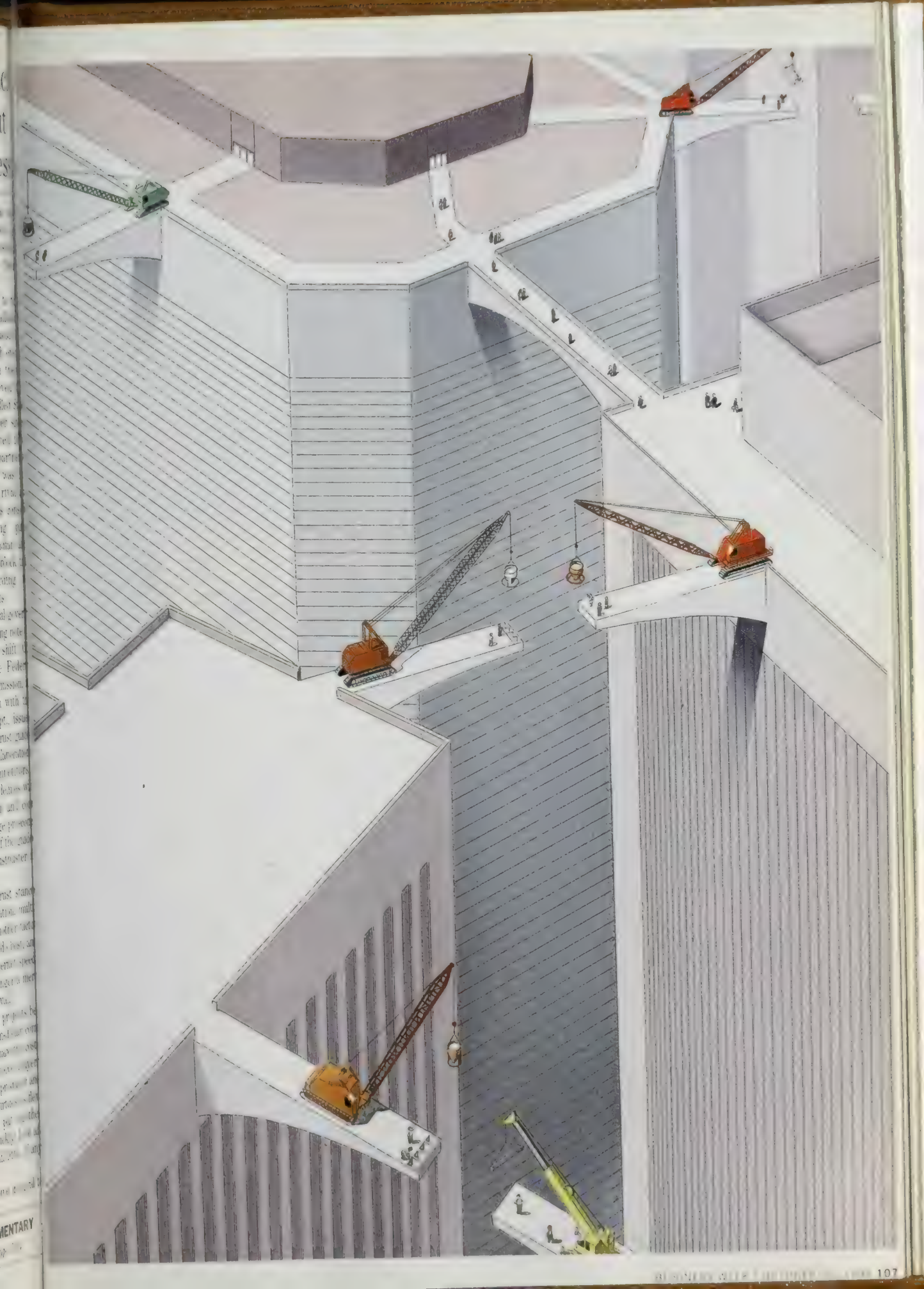
CORE CONCERN. Besides today's agreeable antitrust stance, what's driving the surge of alliances is globalization: multinational companies pushing into new markets. Another factor is the notion of "core competency": Do what you do best, and outsource through partnerships. And with the Internet speeding things up to cyber time, nimbleness is no longer a mere competitive advantage but a necessity for survival.

Most alliances are created to share risks. As projects become ever larger and more complex, even billion-dollar companies would rather have partners in a deal to share the costs of, say, research and development. Others involve players with complementary operations, for example, a producer and a distributor. More broadly, alliances have such virtues as flexibility, speed, informality, and economy. You can put together an alliance in no time and fold it up just as quickly; love affairs instead of marriages. Many alliances entail little if any paperwork—maybe only a handshake.

Because of that flexibility, alliances have become integral

Special Report

PARTNERS



networking

intel is making the network smarter. in the non-stop internet economy, there's an increasing need for "intelligent" components that can keep up with today's hyper-accelerated rate of change in networking and telecommunications. the new intel internet exchange architecture introduces a highly flexible approach to networking. it extends equipment lifetime by using re-programmable software to enable new capabilities like voice, video and data services—saving the time and expense of replacing hardware. developments like this, along with intel's emerging voice/data technologies and virtual private networks, are helping companies great and small to establish a smarter, more efficient, and harder-working e-business model. the thinking that put the brains inside the personal computer is putting the brains inside the network. (what's next for networking? → intel.com/ebusiness)

intel.



What's driving partnerships? Regulatory approval, global competition, and the need to cut risks or share technology

LARRAINE SEGIL: ORACLE HAS 15,000 ALLIANCES

Bells over access to the Baby Bell's network. At the same time, these companies actively cooperate on wholesale services. The relationships are far from easy. Says Nalebuff, "This is an example of, 'I'm fighting with you over what the rules of the game will be—to tilt them in my favor—but in the meantime I will be happy to work with you to play the game as best we can.'"

Another example of the complex partnership world is how Intel and Microsoft cooperate to enhance the Wintel world, which combines Windows software and Intel chip architecture. Microsoft and Intel have considered one of the most successful partnerships of all time. Yet they compete over whose standard will rule and over the boundaries between hardware and software. Intel wants more competition and lower prices on the software side, while Microsoft wants the same thing on the hardware side. That is because

customers who are buying both the hardware and software together only care about the combined price of the bundle.

Still, the success of the Intel/Microsoft combination appears to be the exception rather than the rule. Many servers take a negative stance on these relationships. They say partnerships seldom work, and cite a whole host of problems, not the least being that large numbers of new

relationships can be too difficult to manage. Andersen Consulting Managing Partner Charles Kalmbach Jr. says it's an astonishing 61% of corporate partnerships are either outright failures

seen as "limping along." Part of the problem is that only 51% of alliances use formal performance yardsticks. Only 20% of executives consider such yardsticks reliable barometers of success, according to Kalmbach. Some experts, such as Professor Bruce Greenwald of Columbia University's business school, are skeptical about the alliance boom. He sees it as a fad, arguing that partnership is just a fancy term for working with customers and suppliers. There are only two justifiable reasons for creating an alliance:

companies' strategies. Says Jesse D. Odell, an account supervisor for Schwartz Communications Inc. in San Francisco, a public-relations firm that specializes in technology and health-care companies: "New product announcements aren't nearly as important anymore. We're at a point where technology isn't even as important. Everyone assumes you have technology. Now, it's all about business models. And what really validates your business model are your partners and your customers."

LOSE-LOSE? That's certainly true in the Internet world, where young companies backed by venture capitalists often forge partnerships with dozens of other companies right out of the box. "In some ways, joint venture is an old-fashioned term," says David Roux of Silver Lake Partners, a \$2.3 billion leveraged-buyout tech fund based in Menlo Park, Calif. "Traditionally, a joint venture...was a weird sort of organizational mongrel of modern Corporate America. It didn't have a good rap. It didn't get good people. But I think there's a whole method of cooperation that has evolved beyond that. They have transformed themselves to many more flavors and subtleties than the old joint ventures."

Many alliances, though, turn out to be lose-lose instead of win-win. Yale School of Management Professor Barry J. Nalebuff, author of the book *Co-opetition*, says forming alliances—especially with your competitors—can make your life a lot more complicated. "More interrelationships mean more conflicts of interest—along with more divorces (and custody battles). There will be a big premium on developing the skill of finding the right partners and writing prenuptials."

Nalebuff gives the example of independent local phone carriers like Covad and long-distance carriers such as Sprint battling the Baby

Special Report

CORPORATE FINANCE

WHY ALLIANCES CAN MAKE MORE SENSE THAN ACQUISITION

- Flexibility and informality promote efficiencies
- Access to new markets and technologies
- Ability to create and disband projects with minimum paperwork
- Multiple parties share risks and expenses
- Partners can retain their independent brand identification
- Working with partners possessing multiple skills can create major synergies
- Rivals can often work harmoniously together
- Alliances can take multifarious forms, from simple R&D deals to huge projects
- Ventures can accommodate dozens of participants
- Antitrust laws can shelter cooperative R&D activities

DATA: BW

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Up to 61% of alliances fail or limp along, says one expert. Rarely, says another, do they improve return on capital

YALE'S NALEBUFF SEES MARITAL COMPLICATION

Communications International Inc., there will be murky questions as to whether their new partnership succeeds or fails. HP only gets paid if the partnership makes money. Instead of charging Qwest for its computers, HP has given Qwest \$500 million worth of server hardware, software, and services for free. Together, the companies have created a business called CyberCenters offering end-to-end Internet solutions, with customer service available 24 hours a day, seven days a week.

CALM SPIRITS. Says HP's chief marketing officer Earle, "this is a pretty significant change in alliance. Most people talk about partnerships, but in a partnership, we're only paid if we make money."

Of course, traditional joint ventures still do exist despite the fact that parent companies can sometimes cause more harm than harmony. When corporate parents bicker, joint ventures, like children, often get caught up in the battle. Executives often take sides with one parent against the other. The result? A joint venture that has lost its focus.

Or not. For contrast, look at a joint venture between Guinness and LVMH Moët Hennessy Louis Vuitton, whose partnership continued to flourish in spite of a nasty scrap between its parents. Guinness and LVMH formed a partnership called Schieffelin & Somerset for marketing and distributing spirits in the U.S. in 1987. But when Guinness announced it was planning to merge with Grand Metropolitan PLC,

in 1997, LVMH execs were not pleased. LVMH actively tried to block the deal, claiming it would negatively effect its joint venture with Guinness. Meanwhile, despite the bitter arguments between its parents across the Atlantic, the American joint venture was doing just fine, thank you. "It is a good example of a joint venture network that has had the ability to ride out tension and conflict between parent companies," says Kenneth Mildwaters, the former general counsel of Guinness' parent, Diageo PLC. Mildwaters says the reason the joint venture succeeded is that senior management stayed loyal to the joint venture, not to either Guinness or LVMH.

The bottom line is: Do partnerships create value? Despite their high failure rate, many senior executives are convinced

alliances make strategic sense. The chief executive of Airbus Industries, a marketing consortium made up of French, British, and German aerospace companies, says European companies are increasingly looking to partnerships to enhance the bottom line. "It is partnerships which have helped create shareholder value," says CEO Noel Forgeard, referring to France's industries in general and Airbus in particular. For instance, says Forgeard, "It is obvious none of the Airbus partners would be able to establish a company comparable with Boeing in a world market by themselves."

"We joke that business isn't war and it isn't peace—it's marriage and peace, or marriage," says Nalebuff. The future of business, concludes Nalebuff, is that fewer companies will succeed by going it alone.

By Debra Sparks in New York

says Greenwalk: cost savings achieved through economies of scale, or access to proprietary technology. Rarely, adds Greenwald, do alliances improve return on capital.

Despite these detractors, deals continue to flourish across the board. Take Pam Moret, a vice-president of variable assets at American Express Financial Advisors, in Minneapolis, whose company was looking for new ways to stimulate growth. Traditionally, she says, her options would have been to either buy or build. But now there is a third option—"to bond." American Express Financial recently struck a partnership with its archrival, Charles Schwab Corp. American Express now offers Schwab's network of mutual funds to its own clients. That partnership boosted American Express' offerings from 500 to 2900 funds. "In many ways, we're fierce competitors," says Moret. But she adds: "It works to the benefit of both companies."

Of course, the issue is how to make money with your partner. In a traditional joint venture, where each partner contributes equity and together creates a stand-alone entity, success or failure is easy for the world to see. But in a loosely formed partnership, results can be tougher to gauge. It can be hard to discern if a marketing alliance really enhances a company's bottom line or even how to track the costs of partnership. For instance, it's tricky to know how much management time is spent working on the alliance, or whether a joint sales force is selling a partnership product or a proprietary product.

In the case of a new alliance formed by Hewlett-Packard with telecom and Internet service provider, Qwest

Special Report

CORPORATE FINANCE

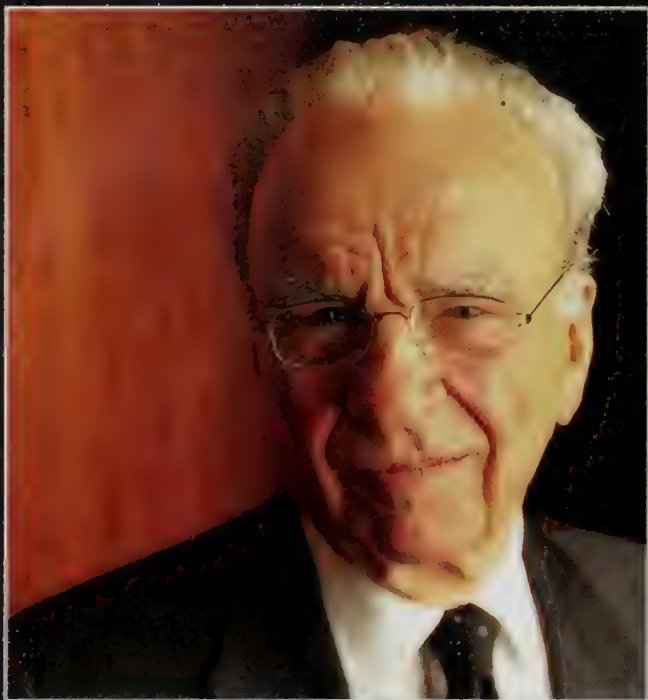
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EGOS ASIDE: Ancient rivalries don't keep Murdoch and Malone from making new deals when the terms are right

LEGAL FIGHTS ARE THE STUFF OF HOLLYWOOD. And while Walt Disney Co. Chairman Michael D. Eisner and DreamWorks partner Jeffrey Katzenberg were publicly dueling in court over the \$250 million Katzenberg says was owed him, their companies were having their own duel. Each had an animated movie, featuring ants. Both headed to theaters last year within months of one another. But even while the two were wrangling on two fronts, their companies will soon share millions from syndicating reruns of *Spin City*, the Michael J. Fox sitcom that DreamWorks makes and in which Disney invests.

Indeed, even as media companies battle with one another for market share of the box office, TV ratings, or a place on *Billboard's* Top 200, they are increasingly forming joint ventures or investing in one another's companies. This summer, studios took in partners to make such box office hits as *Runaway Bride* and *The Sixth Sense*.

And in media ventures that dot the globe, it's just as likely that News Corp. and Viacom Inc., which own rival kids' cable channels in the U.S., will jointly own the British version of Viacom's Nickelodeon channel. "Sometimes you have to grit your teeth and treat your enemy as your partner," says Frank Biondi, a former president at Viacom and Universal Pictures. "No one ever said this business was all fun."

With foreign markets exploding and the rush of new technology opening up distribution avenues faster than most moguls can calculate, media companies are rushing to find partners in as many new areas as possible. The reason: No one is sure which will be the winning avenue to consumers for their films, TV shows, and music products.

When tiny TiVo Inc. recently went looking for investors back its interactive set-top TV box, it got money from NBC, and CBS, as well as Hughes Electronics Corp.'s DirecTV satellite service and three cable companies with which it competes. "Today the race is to grab market share," says I. C. Hammer, vice-president at investment banker Houlihan Lokey Howard Zuckin. "Technology is accelerating that, and companies that try to protect their crown jewels are likely to lose this race."

WHEN OLD FOES NEED EACH OTHER

Media alliances pool talent and cash to crack Asian markets or open new distribution networks

Special Report

CORPORATE FINANCE

The moguls are listing partners, pry open traditional closed Asian markets. News Corp. Chairman Rupert Murdoch is up joint ventures with governments or highly placed individuals to make TV shows and movies in China, Indonesia, and India.

Walt Disney Co. is seeking partners for a new theme park in Hong Kong, and Viacom's MTV Networks has partners in Brazil, Australia, and elsewhere.

Confronted with the siphoning off of its viewers to cable and the Internet, General Electric Co.'s NBC unit went on a buying spree that started in 1995. It began with a joint \$500 million investment with Microsoft Corp. to launch news channel MSNBC on both cable and the Net. Today, NBC owns pieces of such disparate media properties as the Bravo and America's Movie Classics channels, Internet site autobytel.com, and video streaming company IntervU Inc.

Still, no one seems to come close to the expansive media holdings of former cable king John C. Malone, who heads AT&T's independent subsidiary Liberty Media Group. The second-largest shareholder in both Time Warner Inc. and News Corp., Liberty also owns pieces in half the industry's largest cable channels, along with 44% of *TV Guide* and 1

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ALLIANCES: A SAMPLER OF MEDIA/ENTERTAINMENT DEALS



THE DEAL A tiny Sunnyvale (Calif.) company that is developing a set-top box that provides interactive-TV service.

WHY This summer, TiVo raised \$32 million in private placements from CBS, NBC, Disney/ABC, Hughes's DirecTV satellite service, and cable company Comcast.

SIGNIFICANCE All of these companies compete with one another. But by collaborating, they wanted to make sure that they wouldn't be left out when this new interactive technology came into being.

DATA: BUSINESS WEEK

the rush of new technologies has fragmented the viewing audience, federal regulatory agencies seem inclined to allow most of the deals to go forward. Even AT&T's recent purchase of cable company MediaOne Group Inc., combining two of the nation's two largest operators, will likely pass muster.

STRANGE TIES. In the days before striking a \$36 billion deal to merge with Viacom, CBS Chairman Mel Karmazin talked boldly of a deal that would join his network with NBC. The notion of a union between rivals NBC and CBS doesn't seem so far-fetched these days compared to the duo of Ted Turner and Rupert Murdoch, often bitter rivals who now have been forced to work together. The two men openly sparred over Murdoch's plan to take on Turner's CNN with a cable news channel of his own but later joined forces to launch a music channel in Europe. The Murdoch-controlled BSkyB satellite distributes Turner cable channels in Britain. In Asia, Murdoch's Star TV service jointly operates a sports service with ESPN, the Disney unit that battled with Murdoch's Fox Sports cable service over sports rights in the U.S.

Media joint ventures and partnerships don't always work smoothly. Universal Pictures and Paramount Pictures Corp., onetime partners in the USA cable network, battled when Universal forced the channel to air episodes of *Major Dad* when it couldn't get TV stations around the U.S. to buy the reruns. That saddled USA with \$15 million in write-downs, former execs recall.

Eventually, the two sides wound up in court: Universal's new owner, Seagram Co., sued to stop Viacom, Paramount's parent, from launching new cable channels that

of set-top maker General Instrument Corp. The concentration of so much potential power in the hands of a relatively small number of media moguls might have bothered the trustbusters of old. Dean Alger, author of the recently published *Megamedia*, is concerned about the "increasingly large number of joint ventures and equity investments, linking many of the big media companies in multiple ways... [Those links] on top of the increasingly extreme concentration of media ownership, suggests significantly compromised principles of marketplace competition."

The government required Malone to sign an agreement not to vote his Time Warner shares but has required no similar restriction on his more recently acquired News Corp. shares. Apparently persuaded that

Seagram thought would compete against USA. The two sides settled, and Seagram purchased Viacom's 50% of USA. "You always find yourself walking a fine line," says Jeff Shell, president of Fox Sports Networks, the News Corp. unit whose partners, through the Rainbow Programming coalition, include cable operator Cablevision Systems Corp. and NBC. "Everyone has their own agenda, but in the end it works because both sides believe in the overall mission. In fact, the partnership was formed because both sides needed the other."

For Rainbow and Liberty Media, its onetime partner, rising sports programming costs were cutting into earnings of their local sports channels. Fox created the affiliates to sell advertising time on the national programming it intended to create.

No company has bulked up with disparate pieces better than Barry Diller's USA Network Inc., however. Bet that the onetime head of Fox Inc. will turn the Home Shopping Network Inc. into a major media company, investors have traded in their own assets for a piece of his company. Today, Diller's major investors include Universal Pictures, Seagram, Liberty Media, and Allen. Each of Diller's investors has

competing interests. And they don't always agree with Diller. Last year, Seagram stopped Diller from buying for fear its effective 45% stake would be diluted. That didn't stop Diller from continuing to look for new partners for his company's 13 TV stations, including a long-mooted deal to create a joint venture with the ABC stations. That deal is said to be caught up in dueling egos, with each unwilling to cede control to the other. In time, they will likely agree to pool their interests. And why not? They need to look at their fellow media moguls, who are rushing to join one another before it's too late to find a willing partner. And hardly seems to matter that Diller and Disney's Eisner, who worked together more than 20 years at both ABC and Paramount, spent much of the later 1980s happy with each other. In mid-September, the two men were part of a small group of media moguls who toured Ireland by bicycle for a few days. Nothing like a trip through the Irish countryside to melt partners out of competitors.

By Ron Grover in Los Angeles
Richard Siklos in New York



THE DEAL The venerable publication, 44% owned by News Corp. and AT&T's Liberty Media unit, had combined their sports channels to form Fox Liberty. When Liberty sold its 50% stake to News Corp., its name was changed to Fox Sports. The two companies have recently announced plans to merge TV Guide with Gemstar, each taking 19% stakes in the enlarged company that will make electronic interactive program guides in addition to its magazine.

SIGNIFICANCE The deal is one of several joint ventures struck by rogue media moguls John Malone and Rupert Murdoch.

DATA: BUSINESS WEEK

Special Report

CORPORATE FINANCE



THE DEAL In 1996, NBC and Microsoft created a 50-50 joint venture to operate an all-new cable channel and online site to go with NBC's broadcast network.

SIGNIFICANCE The outlet was the first to attempt to program for the expected convergence of TV and the Internet.

DATA: BUSINESS WEEK

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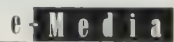
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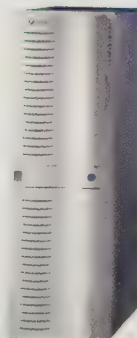
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COMPANIES IN FEW INDUSTRIES COMPETE AS fiercely—or collaborate as effectively—as those in pharmaceuticals. From narrowly drawn co-marketing pacts, in which outfits team up to sell particular medicines, to full-blown joint ventures that have their own managements and operations, drugmakers embrace a full menu of alliances. And while the industry boasts some of the most profitable and amicable pacts in Corporate America, it is also home to some of the biggest and most rancorous failures.

Johnson & Johnson's alliance with Merck & Co. in the marketing of Pepcid AC is a classic win-win. With Merck as developer of the stomach-distress remedy and J&J as marketer, they have driven the product to No. 1. The pairing has worked because of clearly defined roles, common interests, and hands-on management. "The elements that make a joint venture successful are listening, paying attention, spending time, and having the right chemistry on a personal level," says Merck Chief Financial Officer Judy C. Lewent, who guided the deal for her company.

But J&J has also seen just how sour a corporate partnership can go. Since at least 1995, the New Jersey giant has been at war with Amgen Inc., the California biotech outfit, over their 14-year-old alliance to market the blood-bolstering treatment erythropoietin. Nasty legal actions, arbitration, and vicious competition in the marketplace have doomed the relationship. The problem: unforeseen market changes, mistrust, and plenty of arrogance on both sides. "There has been continual disagreement throughout their history," says Elise T. Wang, a biotech analyst at Paine Webber Group Inc.

When things go wrong in corporate alliances, there's usually plenty of blame to go around. J&J and Amgen have never treated each other as equals. Instead of agreeing to share their gains evenly, J&J has landed most of the sales of its version of the \$3.7 billion medicine by selling it for chemotherapy and

other broader uses, while Amgen has been left with the relatively smaller dialysis market. Worse, the companies haven't seen eye to eye on collaboration for follow-on products. That's why Amgen wound up going to arbitration and last December won the right to sell a chemically similar medicine that

gives patients a key edge over the current formula—once-a-week use instead of daily. Arbitration ruled that the new formulation was different enough to fall outside the licensing agreement between Amgen and J&J.

To be sure, animosity can be inevitable among companies that normally compete against one another. But partners overcome that because they have powerful mutual needs they can't meet separately. "You really need to focus on what each party brings to the relationship," says Pfizer Inc. President Henry McKinnell. "There has to be a recognition of each other's capability." Pfizer teamed with Warner-Lambert Co. to market cholesterol-reducing megadrug Lipitor, now a billion seller. Warner-Lambert brought the medicine; Pfizer added sales firepower. "At first, we started out a bit suspicious of each other. Now we've expanded the relationship," says McKinnell. "It's gotten to be a win-win."

But maybe the biggest problem arises when opinions are too similar. In September, three Japanese drugmakers—Takeda Chemical Industries, Eisai, and Daiichi Pharmaceutical—agreed to plead guilty to U.S. antitrust violations and pay some \$137 million in what U.S. Justice Dept. officials say was a global price-fixing conspiracy over vitamins. Last spring, Switzerland's F. Hoffmann

LaRoche and Germany's BASF agreed to pay some \$725 million for their alleged roles in the conspiracy.

For drugmakers and consumers alike, collaboration can sometimes be a costly problem. A little suspicion may be a good thing.

*By Joseph Weber in Toronto
with Amy Barrett in Philadelphia*



LEWENT: She guided Merck in its joint venture with J&J

VOLATILE COMBOS

Pharmaceutical alliances can boost both players' health—or drag them both down

Special Report

CORPORATE FINANCE

TEAMWORK

Successful partnerships between rival drugmakers require clearly defined roles, common interests, and hands-on management. Dealbreakers: Conflicting aims, mistrust, and arrogance

WINNER

JOHNSON & JOHNSON/MERCK

Merck contributed its prescription drug Pepcid so J&J could market it as an over-the-counter remedy. The drug is a home run: It dominates the lucrative world of OTC stomach-distress remedies.

MISMATCH

JOHNSON & JOHNSON/AMGEN

J&J helped commercialize Amgen's blood-bolstering treatment erythropoietin. But the partners squabbled over sales rights and a follow-on drug, even taking each other to court.

DIVORCE

ASTRA/MERCK They turned ulcer medicine Prilosec into the world's best-selling drug. But Astra and Merck have undone this alliance. Astra wanted to merge with Zeneca. Its exit will cost Astra more than \$5 billion.

DATA BUSINESS WEEK

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*Scott Hartz-Managing Partner,
Global Consulting*

PRICEWATERHOUSECOOPERS 

"PeopleSoft is a market leader in analytic applications with its Enterprise Performance Management product family. As a co-developer of these Internet-enabled products, KPMG has found PeopleSoft to be an outstanding partner. We see these applications as the cornerstone of effective business management for our mutual customers in the next millennium."



Rod McGeary-Vice Chairman, Consulting

"PeopleSoft provides compelling and easy to use enterprise business applications. Our business alliance with them has been mutually beneficial. Organizations would do well to consider PeopleSoft solutions as a foundation for their Internet and eBusiness deployments."

Pat Loconto-CEO

**Deloitte
Consulting**

"PeopleSoft is a leader in enterprise applications that form a clear foundation for e-business. The partnership of IBM Global Services and PeopleSoft delivers technology solutions that provide real business results fast."



*Doug Elix-General Manager,
IBM Global Services, Americas*

"We at Arthur Andersen see PeopleSoft as one of the clear leaders in the field of Internet-enabled eBusiness software solutions. The partnership between Arthur Andersen and PeopleSoft underscores the commitment, value, and global capabilities we will continue to bring to our joint customers."

*Chuck Kettelman-Global Managing Partner,
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HEART OF THE MATTER: When two rival N.Y. hospitals set up a cardiac facility together, fees soared

WHAT HAPPENS TO HEALTHY RIVALRY WHEN enemies climb into bed together? Maybe closely guarded secrets are suddenly shared. Maybe competition morphs into collaboration—or even collusion. For two airlines, perhaps things become too cozy when they decide to cooperate in flying—and dominating—a lucrative route together. Or a group of manufacturers turns its joint-research forum into a tacit agreement on how to price competing products.

As a growing number of rivals rush to form strategic alliances and joint ventures, critics are starting to worry about the impact on competition. At the same time, the specter of global competition has prompted governments to actually encourage enemies to team up for research and joint ventures that increase a country's competitive edge. Regulations, of course, discourage schemes that reduce consumer options or price competition. Witness the recently unveiled conspiracy of the world's big vitamin makers setting prices and market share for their bulk product, a drama that played out behind closed doors. But regulators don't always subject ad hoc partnerships to the same scrutiny as outright merger or acquisition—even though the consequences of such partnerships can be equally dramatic in the marketplace. The problem: The difference between disguised illegal behavior and sanctioned—even encouraged—alliances is not always that clear.

THIN LINE. At the very least, regulators have to keep a close eye on how far the alliances can go. On Oct. 1, the Federal Trade Commission, in consultation with the Justice Dept., drafted its long-awaited "Antitrust Guidelines for Collaborations Among Competitors." The goal, says FTC Chairman Robert Pitofsky, is not to discourage such partnerships but to define which ones preserve or even promote competition—and which do not. In his mind, the confusion about collusion may be fueling needless fears among possible partners. "Some people felt they didn't know the line between

legal and illegal activity," says Pitofsky, "so they were passing up the opportunity to get involved in joint ventures."

But the line can be fuzzy indeed. One example of such questionable behavior involved St. Francis Hospital and Vassar Brothers Hospital, the only two acute-care hospitals in Poughkeepsie, N.Y. Several years ago, the fierce rivals each wanted to start a cardiac catheterization lab, but state health department officials said the town only needed one and suggested a joint venture. So they set up a not-for-profit entity called Mid-

Hudson Health to handle the lab and a few other specialized services. Over time, they moved to centralize some administrative functions and purchasing through Mid-Hudson. They also designated one St. Francis executive to negotiate all contracts with insurers for the competing facilities when the state

deregulated hospital insurance fees in 1997. The result? Hospital charges that soared 40% or more above the averages for nearby New York City and Westchester

County, according to New York Attorney General Dennis C. Vacco, who filed an antitrust suit against the duo last year.

The case is still in the courts, but hospital officials continue to insist that they can collaborate and compete at the same time. They argue that the venture has enabled them to develop top-class facilities normally found only in large cities. Vassar Brothers, for one, now has the funds to build a \$70 million wing that will include luxury maternity suites, facilities for open-heart surgery, and a cancer clinic. "Without the money we saved through Mid-Hudson Health, we would never have been able to do this," says Vassar spokeswoman Jeanine Agnolet. St. Francis has its own expansion plans. And each player can develop specialties that don't step too often on the other's feet. The losers may be health insurers and managed-care groups, which can't squeeze out better prices by dealing with each facility separately. But Agnolet argues that insurers are reaping the benefits of joint services without wanting to negotiate joint fees. As she puts it: "They just want to pit us

WHEN IS COZY TOO COZY?

As alliances flourish, regulators are clarifying what is cooperation—and what is collusion

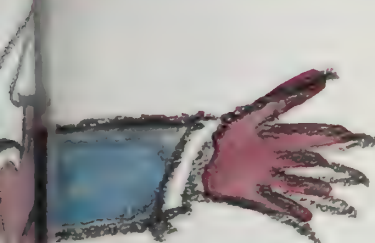
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THE TOP EUROPEAN TELECOMMUNICATIONS
AND A LEADER WORLDWIDE IS SPEL



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\$5.96 billion (+38%)
Net income of the Group:
\$2.62 billion (+33%)
Staff: 179,000 (-6.2%)
Revenue per employee:
\$215,900 (+9.4%)
Earnings per share: \$0.95 (+77%)
Market Cap (10/99): \$122.9 billion
(+60% from 10/98)
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For joint ventures to pass muster, competitors should do something together they can't do alone

THE FTC'S PITOFSKY: ENCOURAGING PARTNERSHIPS

in the guise of a narrow partnership. For such venture work, they usually must involve having competitors do something together that neither would do alone. Otherwise, intentions might be seen to be more dubious. "You can't talk price fix and call it a joint venture," says Peter C. Ward, antitrust lawyer with Baker, Donelson, Bearman & Caldwell Nashville and former FTC counsel. When the actions start to look like a unified operation, regulators may perceive the liaison as more of a marriage. Regulators say that they're determined to crack down on partnerships that result in reduced competition. "We want people to know we will enforce the law as appropriate," says the FTC's Pitofsky.

PRICE CONCERNS. Critics see the greatest need for clarification in joint marketing ventures, which can affect how competitors price their products or divide market share. "That immediately raises the eyebrows of enforcers," says Ira M. Millstien, a lawyer and professor in competitive enterprise and strategy at Yale University. "Once these partnerships touch price, you have an added concern."

While any deal between direct competitors will raise antitrust concerns, regulators seem eager to boost the ones that work. Collective research can encourage innovation, while collective product development can be good for U.S. trade. Indeed, the FTC and Justice seem less concerned about

growth in such alliances than in whether they're actually growing fast enough. Under their draft guidelines, the agencies define "safety zones" of acceptable activity. Competitors can be relatively confident

that their partnership will pass muster if, together, they don't control more than 20% of the market being affected. Even enemies can become fast friends when their mutual interests align. The real challenge for regulators is to make sure that these new partners don't gang up on the consumer.

By Diane Brady in Greenwich, Conn.

against each other." In a small town like Poughkeepsie, she argues, rivals have to work together to deliver the best services.

But most partnerships are rarely so cozy. More common are reluctant liaisons between players who can't afford to tackle a project on their own. A typical deal: research and development that's normally too prohibitive for one company to bear. Regulators rarely worry about such arrangements. In fact, they encourage it. Otherwise, exploratory research might never be carried out, and niche-market products never manufactured.

For an alliance between rivals to sit well with regulators, there often must be some evidence of necessity or common good. During the 1970s, for example, auto manufacturers worked together on producing cleaner-burning car engines. The problem is when companies cloak anticompetitive behavior

Special Report

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HOW THE TRUSTBUSTERS SEE IT

WHAT'S O.K.



GE AIRCRAFT ENGINES/PRATT & WHITNEY

Joint venture to develop and sell a new engine for the Airbus "super-jumbo" A3XX
Why Approved: Hefty development costs, limited market; Rolls Royce will have a rival engine

AMERICAN EXPRESS/TATA FINANCE

Joint venture to provide money-changing and foreign exchange services in India

Why Approved: Marriage of expertise, capital, and growth in a new market

MICROSOFT/LYCOS/EXCITE/TICKETMASTER/DELL

Alliance to form an online auction network with Fairmarket Inc., featured in Web sites

Why Approved: Faces formidable competitor eBay; limited pooling of resources

WHAT'S NOT O.K.



ANHEUSER-BUSCH/ANTARCTIC BEER

Anheuser takes a 5% stake in Antarctica beer, with an option to buy 30%

Why rejected: When Anheuser declined to go to 30%, Brazilian antitrusters ended the deal

BRITISH AIRWAYS/AMERICAN AIRLINES

Sweeping alliance that would allow duo to cooperate on fares and capacity on key routes

Why rejected: U.S. regulators cited need for greater access to other carriers at London's Heathrow Airport

ST. FRANCIS HOSPITAL/VASSAR BROS. HOSPITAL

Two Poughkeepsie (N.Y.) hospitals cooperate on facility, negotiate unified rates and services

Why rejected: State officials said charging one price while keeping separate, competitive facilities amounts to price-fixing; case is still before courts



@joe

Mother Parker's Tea and Coffee is an **IBM** e-business



Industry: Food and Beverage

Company: Mother Parker's

Partner: SSA

Tools: AS/400e™, Netfinity®, Java®

Solution: e-commerce Extranet

The e-commerce extranet greatly reduces the need for Mother Parker's to key in orders manually, saving both time and cost of order entry.

1

Customers can confirm orders and track shipping through the self-service order entry.

2

Retailers can track past ordering habits for up to two years.

3

Passcodes call up customized pricing based on retailers' previously negotiated contracts.

4

Orders can now be processed on a single online form instead of several more complicated paper forms.

5

In a competitive marketplace, customers are able to place high demands on manufacturers. It's no surprise to hear consumers insist on excellent service, competitive prices and quicker shipment. Mother Parker's Tea and Coffee is using e-business to help answer these demands and stay ahead of its competitors.

Mother Parker's, Canada's largest supplier of private brand coffee, has a history of using technology to gain competitive advantage. The company approached System Software Associates (SSA), Ironside Technologies and IBM to build an e-commerce extranet. The site gives customers better access to Mother Parker's full line of products, as well as faster ordering and shipment.

SSA has been an IBM Business Partner for over 15 years, delivering solutions to 6,500 customers in 90 countries. SSA works exclusively in the manufacturing industry, creating integrated supply chain solutions using e-business and enterprise software.

"Our customers have really responded to the quick, easy ordering," says Harry Hastilow, director of information technology for Mother Parker's Tea and Coffee. To find out more, call 1 800 IBM 7080, ext. BP06, or download a complimentary online consultant report* at www.ibm.com/e-business/ssa



eblend

System Software Associates is an **IBM** Business Partner

By Peter Coy

THE ALLIANCE MANAGER: I'M O.K., YOU'RE O.K.

Frederick L. Maurer had a dark moment in 1994, just a few years after he started up a U.S.-Japanese joint venture. Maurer's Cormatech Inc. in Durham, N.C., was losing money because U.S. electric utilities weren't buying its room-sized ceramic honeycombs, which remove pollutants from the flue gases of power plants. In the absence of profits, the only money trickling back to Maurer's corporate parents, Corning Inc. and Mitsubishi Heavy Industries Ltd., was royalty payments for Cormatech's use of their patents. And most of the royalties were going to Mitsubishi, because it supplied most of the technology. To some people back at Corning headquarters, Maurer's venture was not only unsuccessful, it was imbalanced. Grumble, grumble.

Maurer's solution was Solomonic. He scratched around and found a Corning ceramics-processing invention that increased the scrubbers' pollution-scarfing surface area. That improved the product—and, just as important, evened out the two royalty streams, so Corning had no reason to feel jealous of its partner across the Pacific.

UNSUNG HERO. Today, although Cormatech has become profitable, Maurer continues to take extreme care that the two partners evenly share royalties and profits. "It breeds trust between the two groups, and that trust feeds on itself," says Maurer. "The disaster comes when both sides distrust each other's intentions and start doing things that feed that distrust."

The business world routinely glorifies tough, take-no-prisoners types. But magazine cover treatment is seldom doled out to a relatively new, usually unsung, hero of capitalism: the alliance manager, who is skilled in making everyone in a joint venture happy. "It requires a certain amount of humility, a willingness to learn—the very stuff I didn't find



when I debriefed most of the companies in my sample," says Kathryn Rudie Harrigan, a professor at Columbia University's School of Business who has studied joint ventures.

The toughest time for such an exec is when the venture isn't working out as planned. Take the Pepsi-Lipton Tea Partnership. It was formed in 1991 by Pepsi-Cola North

Together they concocted Lipton Brisk, an iced tea that's sold in cans and plastic bottles and can be produced and distributed using Pepsi's existing facilities. Today, Lipton Brisk is the leader of its market segment. The key, says Trott: "We were open and honest with each other. It's not just smoothing over. There's also a legitimate caring."

True, it's possible to spend too much time on the warm-and-fuzzy side of alliances. This is business, not love. Bud Moeller, a partner in the San Francisco office of Andersen Consulting, says that in picking someone to head a joint venture, he would want someone who is "75% entrepreneurial, 25% working within the system." If alliance execs lack a strong entrepreneurial drive, says Moeller, "They'll spend all their time in essence catering to the conservatism of the parent companies."

That said, even the most driven competitors understand that an alliance will fall to pieces unless everyone involved is kept happy. Computer Sciences Corp., which has a contract to supply computing and communications services to J.P. Morgan & Co., bends over backward to give parts of the work to subcontractors that Morgan chose—even though some are fierce rivals of CSC. "In the long run, that will pay us dividends, even though in the short run we might forgo some revenue," says James D. Cook, a CSC group president who is lead executive of the "Pinnacle Alliance"—Morgan's name for its assemblage of contractors. Indeed, CSC's success with Pinnacle helped it land a huge lead-contractor job with the IRS.

Want to make sure your joint venture or alliance works? Think of what makes a good marriage. Maybe your spouse has a few ideas....

Special Report

CORPORATE FINANCE

America and Thomas J. Lipton Co. in Englewood Cliffs, N.J., to make Lipton's Iced Tea, which is sold in glass bottles. But by 1992, it was clear that the partners had overestimated demand and overinvested in plant and equipment. "There was some second-guessing: 'Wow, is this what we wanted to get into?'" recalls Dan Trott, the partnership's general manager.

But a reservoir of trust got the two parents to keep plugging away.

Coy is associate economics editor.

HOW GOOD ARE THE GOMEZ RATINGS?

Secrecy and selling data to brokers it ranks draws fire

For online brokers, getting a top rating from Gomez Advisors Inc. is like winning an Oscar. "It's the Academy Awards of the brokerage," says Douglas Doyle, director of product marketing for E*Trade Group Inc. And no firm was happier than E*Trade when Gomez, which calls itself the eCommerce Authority, named it the nation's top broker. On Sept. 29, E*Trade took out full-page newspaper ads to boast of its accolade and plastered the award on its Web site. But the high-profile Gomez ratings, which are updated quarterly, are coming under fire. Companies rated by Gomez, as well as rivals in the online-ratings business, question the objectivity of its rankings. The problem: Gomez doesn't disclose the criteria used in its ratings and generates all of its revenue by selling advertising on its Web site and market research to the companies it ranks. "Their system is subject to bias," says Farhad Mohit, president of the online-ratings service BizRate.com. "A top-rated company is a top advertiser, are they going to easily be knocked down in the rankings?" But Gomez CEO Julio Gomez insists maintains a strict separation of research and state. "There is nothing that



GOMEZ: "Our integrity is paramount"

can be bought in terms of our rankings," he says. "Our integrity is paramount." He says his ratings are based on 250 criteria that he keeps confidential for fear that competitors will clone his system. "Am I supposed to give a couple of college kids the blueprint for my business so they can knock it off?"

What you see on the Web site is a summary scorecard. Right now, for example, Gomez rates E*Trade tops in

ease of use, but the Web site does not detail what criteria Gomez used to determine that. Firms rated by Gomez can buy data that might help them improve their sites and thus move up in the rankings. At a cost of \$24,000 to \$48,000 annually, depending on the size of the firm, they can gain access to about 40 criteria, along with a host of other data, Gomez says. Gomez recently launched a Web-based version of its research service, called GomezPro, which Gomez calls "the platform for the next generation of knowledge transfer and market intelligence for e-commerce."

Many online brokers consider the Gomez ratings an important evaluation of how they stack up. But some industry execs question the Gomez research service because it encourages companies to "pay to play," says one former Charles Schwab Corp. exec. When Schwab's Gomez rankings slid into the teens in early '98, company execs said they asked the firm what they needed to do to improve their standing. The firm suggested Schwab sign up for its consulting service. "We didn't care to associate with them at first because of the appearance of a conflict," says the exec. A Schwab spokeswoman denies that there was any hesitation in signing up with Gomez and says: "They provide thoughtful, first-rate information."

WHY THE MOVE? Gomez says Schwab eventually did sign up and received "a general analysis of the site and recommendations" about how to improve it. He says Schwab did not receive any detailed information from the scorecard data. But he adds that Schwab has implemented some suggestions and made others on its own, and that has moved Schwab up in the ratings. Schwab now ranks second behind E*Trade for overall performance.

Schwab isn't the only online brokerage that is buying Gomez' data. About half of Gomez' nearly \$2.5 million in revenues over the past 15 months came

THE RAP ON GOMEZ ADVISORS

Its rankings are based on proprietary criteria, leaving consumers to wonder why one firm is favored over another.

It accepts advertising from companies it rates, raising questions about potential conflicts of interest.

It sells its ratings research, including some of the criteria it uses, giving an advantage to those who can afford to buy the research.

Firm	Overall Score	By Category
1. E*Trade	9.7/10	Best Overall
2. Charles Schwab	9.6/10	Best Customer Service
3. Ameritrade	9.5/10	Best Research
4. Fidelity	9.4/10	Best Execution
5. Interactive Brokers	9.3/10	Best International
6. Sun Life	9.2/10	Best International
7. ABN-AMRO	9.1/10	Best International
8. First Union	9.0/10	Best International
9. Citicorp	8.9/10	Best International
10. Wells Fargo	8.8/10	Best International
11. Bank of America	8.7/10	Best International
12. Sun Life	8.6/10	Best International
13. Sun Life	8.5/10	Best International
14. Sun Life	8.4/10	Best International
15. Sun Life	8.3/10	Best International
16. Sun Life	8.2/10	Best International
17. Sun Life	8.1/10	Best International
18. Sun Life	8.0/10	Best International
19. Sun Life	7.9/10	Best International
20. Sun Life	7.8/10	Best International

from its research business, according to public filings with the Securities & Exchange Commission.

Gomez says he wants his firm to become the "Consumer Reports of the Internet." But he is taking a different approach from Consumers Union, which publishes *Consumer Reports* magazine (page 182). Consumers Union fully discloses the criteria it uses in its rankings and refuses any financial relationship with companies whose products it rates. It also refuses to let companies with top ratings promote that fact in ads.

PUBLIC PUSH. Consumers Union is also nonprofit, while Gomez is a classic Internet startup, pushing eagerly toward an initial public offering. Some 70% of Gomez' privately held voting stock is owned by Ashton Technology Group Inc., a publicly traded Philadelphia-based holding company for startup-stage technology companies. In April, Gomez Advisors, based in Lincoln, Mass., completed a \$5.5 million private placement that requires the company to go public by April, 2002, or return the capital. Gomez says the process for an initial public offering is under way, and he hopes to go public early next year.

In preparation for the IPO, Gomez is rapidly expanding its ratings service into areas of e-commerce beyond financial services. So far this year, it has launched 19 scorecards for industries ranging from apparel to furniture. "We are building a valuable tool for consumers," he says. By yearend, Gomez says he'll have research products built around the scorecards for the retail, health care, and travel industries.

Gomez faces stiff competition in becoming a resource for online consumer advice. Many Net companies are developing consumer ratings services or have other approaches to guiding consumers through the maze of e-commerce. Yahoo! Inc. is starting to rate shopping sites, and Amazon.com Inc. offers products reviews and recommendations.

Gomez' most direct threat may be BizRate.com. The Web site claims to be "the only independent shopping guide that provides unbiased ratings"—and develops its ratings through online consumer surveys, not Gomez-style staff research. BizRate recently entered into an alliance with *Consumer Reports*.

Gomez has a long way to go to make its Web site tops in the e-commerce ratings game. The site does not register among the top 1,500 measured by Media Metrix, a leading firm that tracks Web usage. Boosting consumer confidence in its ratings might help it on its way.

By Geoffrey Smith in Boston

COMMENTARY

By Jeffrey M. Laderman

WE'RE ALL TECH INVESTORS NOW

Three cheers for Cisco Systems. Let's whoop it up for Microsoft. Go Intel, go Sun, go Dell. If you're invested in the U.S. stock market at all, you had better join the cheering section for the entire technology sector. Even if you don't own a single tech share because you believe the stocks are overpriced, pray for tech. Your financial future depends on what happens to those stocks.

We're all tech investors now. At the end of the third quarter, the 65 technology stocks in the Standard & Poor's 500-stock index accounted for a shade under 25% of the index' market capitalization, compared with 19% in December and a mere 7% in 1992. (chart).

If you are one of the millions of investors who have sunk some \$750 billion into S&P index funds, either directly or through a 401(k) plan, one out of every four of your dollars is now in tech stocks.

BULGING SECTOR. Technology stocks surged from 21% to 25% during the third quarter. That's because tech made gains of 4.4% while other sectors lost ground. If not for tech stocks, notes portfolio strategist Leah Modigliani of Morgan Stanley Dean Witter, the S&P would have been down 9% during the quarter and down 1% year to date. With tech's contribution, the quarterly loss was 6.6%, and 1999 performance remained positive at 5.3%.

This tech bulge is not just a quirk of the S&P. The Russell 1000, a broader large-cap index, is 21.5% tech, too. And just about any U.S. diversified mutual fund that's making tracks these days is fueled by tech stocks as well.

One explanation for most funds' sluggish results is that they haven't invested enough in technology. "If tech is 25% of the market and you're underweighted in tech, it will take

extraordinary stock picking to beat the S&P," says Thomas D. Stevens, chief investment officer for Wilshire Asset Management.

There is a downside to the market's dependence on tech stocks. They are more volatile, and contribute to sharp swings in the market that unnervingly investors. Moreover, while tech companies account for one-quarter of the market cap, they contribute only 12.6% of operating earnings. So if one big tech player disappoints at profit time, the bad

news reverberates over a large swath of the market. After the market closed on Oct. 12, Intel reported profits came in a few cents per share shy of expectations. That helped send the S&P down 2.1% the next day.

History shows any one sector can't maintain its

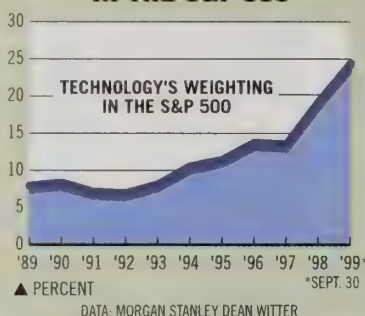
dominance forever. Energy peaked at 30% of the S&P in 1980, and it's now 6.3%. And consumer staples jumped to over 20% in the early 1990s, but they're only half of that today.

Still, there's a powerful case to be made that tech will rule for years. Investment strategist Jeffrey M. Applegate of Lehman Brothers urges clients to overweight technology in their funds because the companies are the principal beneficiaries of a powerful macroeconomic trend: the substitution of capital for labor. Driven by the falling cost of technology, capital-goods prices are declining at a 4% annual rate while labor costs are increasing by 3%. Says Applegate: "If these aren't the growth stocks of our era, I don't know what are."

And whether or not you invest in these companies, it's hard to imagine that the 75% of the market that's not technology would remain healthy if these stocks got sick. Let's go, tech.

Senior Writer Laderman writes about the stock market.

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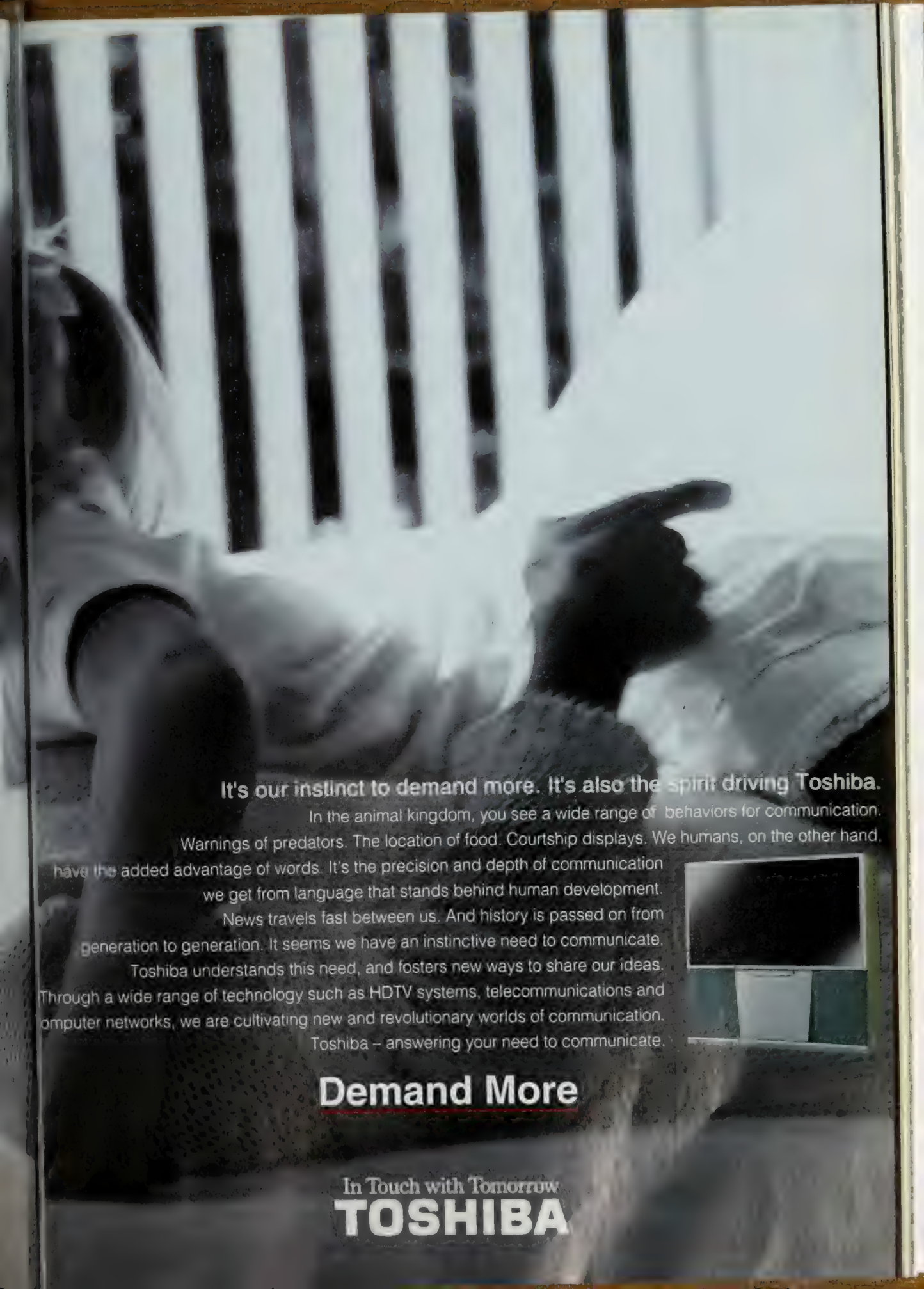
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A close-up portrait of David Wetherell, a man with a mustache, smiling. He is wearing a dark shirt. The background is a warm, orange-brown gradient.

Cover Story

INTERNET EVANGELIST

Who is David Wetherell? And why is everyone talking about him and his hot company, CMGI?

For most folks, summer vacation at the beach means catching a few rays and jumping into the waves. But David S. Wetherell is not most folks. While kicking back two summers ago "beach.calm," his Martha's Vineyard place, the founder and CEO of Internet holding company CMGI Inc. spent his days hooked to the Net. From a cool, dimly lit room, Wetherell could sign on to Web portal Yahoo!'s financial message board using the name "CMG_CEO." At first the other Yahoo! users thought it was a prank. But then one asked what rock band the head of CMGI Europe imagined before joining the company, and G_CEO quickly tapped back, "Genesis—one of the all-time greats." With that, the Wetherell groupies were convinced that he was the real McCoy. And for the next six

put our daughter through college," gushed one fan.

It was the Internet equivalent of Mark McGwire taking a seat on a plane filled with rabid baseball fans. Because when it comes to Internet investing, few have hit the long ball more consistently than Wetherell. The

unusually structured company—

which operates as one part traditional holding company, two parts publicly

traded venture-capital fund—contains a portfolio of 52 Internet ventures. Shares

have rocketed from a split-adjusted 33¢

apiece since its initial public offering in

February, 1994, to a high of \$165 last

April. And although

CMGI, like all other Net companies, got hit by a

big sell-off last spring, its shares have since re-

covered 48% from their August low, to \$104. Even

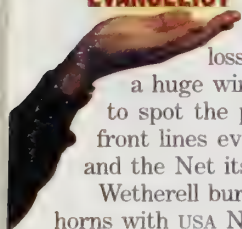
so, \$100 invested at CMGI's IPO would be worth \$31,500 today.

Moreover, CMGI has posted stock market gains that make even some of the hottest Silicon Valley Net stocks look tepid. Sure, Timothy Koogle of Yahoo! or Jeffrey P. Bezos of Amazon.com Inc. up in Seattle get more attention. But since the runup in Net shares took off last October, CMGI shares have soared 700%, compared with gains of 342% for Amazon and 166% for Yahoo! That gives Wetherell, who holds a 16% stake in CMGI, a net worth of about \$1.6 billion.

Even with the tremendous prospects for business on the Net, it's still hard at first glance to grasp what's driving CMGI's heavenly valuation. CMGI's \$10 billion market capitalization teeters on a minuscule base of

days, astonished investors conducted a running online conversation with the 44-year-old Wetherell. They asked him about his business plans, which he carefully answered in detail. And, of course, they couldn't praise Wetherell enough. "Because of CMGI, we have an extra \$22,000 in the account which will help





\$176 million in revenues and an operating loss of \$127 million. But what makes Wetherell a huge winner so far is that he was among the first to spot the potential of the Net and has been on the front lines ever since. He has promoted his companies, and the Net itself, with the passion of a true zealot.

Wetherell burst into view last February when he locked horns with USA Networks Chief Barry Diller over the price of Lycos Inc., the popular CMGI-launched portal Diller wanted to buy (page 150). But before most knew his name, Wetherell was busy placing bets on the future of the Net. In 1995, he paid \$2 million for 80% of Lycos; CMGI's remaining 17% stake is now worth around \$900 million. And in 1996, he bought one-third of GeoCities, the home-page-building Web site, for less than \$6 million. Two years later, he sold CMGI's stake to Yahoo! for shares that earned a net gain of more than \$1 billion.

DAVID WETHERELL'S INTERNET EMPIRE

CMGI owns 11 Internet companies, three deals are pending, and it has sizable shares in 38 others. Here are its main holdings:

Thanks to these and other prescient moves, CMGI now sits atop an astounding \$3 billion in marketable securities, which have snowballed from \$160 million just a year ago. "You have to look at some of the home runs he has had in the past and trust there's a lot of other value in the portfolio," says Nicholas Applegate partner William H. Chenoweth, one of dozens of CMGI's institutional investors. Adds Anthony Bay, a new media executive at Microsoft Corp., which owns 4.8% of CMGI: "As an investor, we have done fantastically well."

But snowballs also melt. And the big risk for Wetherell is that the days of making easy money on the Net from skyrocketing shares could be over. Wetherell's model so far has depended on doing deals, yet the currency he relies on could easily deflate before he creates a going concern that churns out

reliable profits. That, of course, is the dilemma facing virtually all Net ventures right

Cover Story

now. But by betting so much of his financial future on his ability to dodge the Internet market's notorious volatility, Wetherell personifies the huge risks and potential rewards of the online revolution. "CMGI is using highly inflated stock to buy stocks that are highly inflated," says Robert Metcalfe, founder of 3Com Corp. and now a vice-president at market researcher International Data Group. "They're playing with fire."

IMMORAL ACTS. For someone under such intense pressure, Wetherell exudes serenity. With his piercing blue eyes, trademark black T-shirt, and dark gray suit, he has the look and sound of an evangelist who has glimpsed the true order of things: the almost infinite business potential of the Net. Few things get Wetherell as excited as waxing endlessly about the "viral" growth prospects of Web sites, with their ability to make exponential leaps in traffic every day. "We have 2,000 business plans a month coming in," says Wetherell. "The power of innovation, of entrepreneurial motivation, has never been greater because of the Internet."

Of course, there is the small matter of turning all those click-throughs and eyeballs into real revenues and earnings. But in

the world according to Wetherell, showing a profit too soon is akin to an immoral act. The greatest virtue, by contrast, is to spend freely to acquire vast stretches of Internet real estate: the portals, content sites, and advertising and marketing ventures that hold the promise of riches at some vague point on the horizon. "It would be sinful to be making money on the Internet right now, when it's growing this fast," Wetherell claims.

So Wetherell, the venture capitalist, is still in overdrive. He's buying up stakes in Internet startups at a frantic rate and expects to add 60 new companies to CMGI's portfolio in the coming year. And, Wall Street willing, his game plan calls for taking a further 9 or 10 of those companies public in the next 18 months, in hopes of adding \$10 billion to \$15 billion more in marketable securities to CMGI's portfolio by the end of 2000. The pace has been so frenetic that, since August, Wetherell has kept his five-member board on "emergency status" to be ready to vote on deals on a moment's notice.

At the same time, Wetherell is focusing intensely on a dozen or so majority-owned businesses in his portfolio, convinced they can emerge as a powerful force in e-business. To fund the cash needs of his fast-growing empire, he has taken



Content Companies

Portals and online information services

ALTAVISTA A second-tier Web portal acquired in September, Wetherell is pushing aggressively

for growth by linking it to his other Net properties (83%).

LYCOS No. 4 Web portal. Still key despite battle last spring in which Wetherell blocked acquisition by Barry Diller's USA Networks (17%).

MYWAY Creates custom-built portals with localized news and e-commerce links for companies setting up on the Web. Formerly Planet Direct (more than 90%).

ICAST Hired ex-NBC Television President Neil Braun to create online audio and video programming (more than 90%).

MAGNITUDE NETWORK Software helps radio stations broadcast over the Web and link merchandise to on-air promotional spots (more than 90%).

ZINEZONE.COM Multimedia site mixes video, text, and links to profile cutting edge cultural figures (more than 90%).

RAGING BULL Fast-growing online investor forum (50%).

FINDLAW Online legal library for lawyers and the litigious (20%).

WEBCT Software for putting college courses online (28%).

\$138 million in capital gains by gradually selling down CMGI's Lycos stake. And in the past two months, he has ponied some \$4 billion of CMGI's richly priced stock to acquire eight new businesses. His biggest purchase was the \$1.9 billion stock deal to snatch up 83% of the AltaVista portal from Compaq Computer Corp., a key piece of his strategy to link a big audience to his network of online sites.

He has also been hyperactive in the hotly contested area of Web advertising. In the past month, Wetherell has spent \$1.6 billion on Internet advertising outfits Flycast Communications, AdKnowledge, and AdForce, building on his already



Online Infrastructure

Tools and services for building e-commerce

ENGAGE TECHNOLOGIES

Tracks Web traffic to create anonymous user profiles of Web

rs. Allows for targeted online marketing (82%).

MART Places Internet advertisements and sponsorships media buyers across a network of more than 300 sites, ding many CMGI properties (more than 90%).

SITE Manages Web sites for online operations of Levi ss, Catalog City, and many CMGI companies. Dell and soft are also investors (more than 90%).

NET National network of dial-up connections marketed ernet Service Providers (more than 90%).

CKCHARGE Payment software allows online stores to e consumers a few cents per click for reviews, music, icles online.*

IP.COM Technology to provide free dial-up Internet ac- accounts supported by advertisers.*

ORCE Serves up online ads and measures their tiveness.*

AST Sells discounted Internet advertising on less pop- sites.*

CORE.COM Online bill payment, payroll, 401(k) plans, merchant accounts for small businesses (29%).

OXUN Software for building 3-D sites on the Web, a growing trend for retailers (56%).

NET Software for handling customer service over the or the phone (18%).

ICAL PATH Allows sites to offer e-mail service (4%).

TION OF MORE THAN 90% STAKE PENDING

ensive advertising holdings. Wetherell's goal: to become a verhouse in the rapidly emerging market for targeted ad- ertising on the Net. Says Charles W. Berger, CEO of Ad- rice: "CMGI wants to become one of the cornerstone players Internet advertising, and they are investing in the back- ie pieces to do that."

In some ways, the push into targeted Net advertising is a aral for Wetherell. In his pre-Net days, he spent eight urs honing his skills as a direct marketer as head of CMG, or llege Marketing Group. The company sold lists of college ulty and courses to textbook publishers. Still, there was lit- in his background to suggest he would one day be a ma- player in the New Economy. The youngest of six children, spent the first years of his life on his family's 100-acre cken and cattle farm in what was then a rural section of nnecticut north of Hartford. When business went bad, therell's father moved the family first to northern Vermont try potato farming and then to Florida to try his hand at istration.

The warmer weather meant more time for 10-year-old vid, a fanatical baseball player, to perfect his curveball for Little League team. He pitched so hard at games that his

parents worried he would injure his arm, says Wetherell's brother Ralph, a Connecticut strawberry farmer. Off the field, David poured the same intense energy into music and math, talents he inherited from his mother, Georgie, now 84. "He did not sleep any more than he does now," says Ralph. "He was up at 4 or 5 every morning."

Later, David's mother took a secretary's job to pay for his tuition at an elite private school. He stumbled through his first course in computer programming and concluded he had no talent for it. But later, as a mathematics major at Ohio Wesleyan University, he rediscovered computers and began writing code with a passion. A string of software program- ing jobs after graduation in 1976 eventually led to the Boston & Maine Railroad Co., where he was hired to build a system to manage thousands of freight cars.

"A LITTLE NERDY." Wetherell's early days as an entrepreneur were less than auspicious. After starting, then selling a small software company, he was hired to run College Mar- keting Group. But he rushed headlong into a deal to buy an- other direct-mail company that was rife with slipshod ac- counting and big losses. "CMG was very threatened," says Greg Avis, a director. But even amid the troubles, he showed the high-level energy and quick thinking typical of many en- trepreneurs. Adds Glenn Matthews, CMG's founder: "He seemed a little nerdy. He was gangly, enthusiastic. He liked to talk about ideas."

Whatever he lacked in business judgment, moreover, Wetherell made up for with his charisma. "Dave managed to charm the bank," says Matthews, and CMG skirted bankrupt-



E-Commerce

Sales to consumers or busi- nesses over the Web

SHOPPING.COM Sells every- thing from digital cameras to in-line skates (AltaVista subsidiary).

MOTHERNATURE.COM

Purveyor of vitamins, health supplements, and minerals (11%).

CHEMDEX Marketplace for biotech and pharmaceutical supplies (8.5%).

THINGWORLD.COM Sells online "collectibles," such as multimedia clips of NFL games (35%).

FURNITURE.COM Sofas, beds, and furnishings (22%).

NEXTMONET.COM A gallery where undiscovered artists can show their work (38%).

CARPARTS.COM Auto-parts site gives new meaning to the term "search engine" (23%).

BIZBUYER.COM Small businesses entertain bids for products and services they need (33%).

BUYINGEDGE.COM Reverse auction site is a Priceline wannabe (29%).

EXP.COM Provides expert advice and services from parenting to pets (25%).

MONDERA.COM Jewelry and other luxury gifts (18%).

NEXTPLANETOVER.COM Online comic-book merchant (18%).

cy. Over the next six years, business tripled, to \$9 million. But by then, Wetherell seemed bored with the smoothly running operations. In meetings, co-workers say, he often indulged his passion for birdwatching, staring at the trees outside the window. By 1993, when the first signs of electronic publishing began to emerge on the World Wide Web, Wetherell was ready to make his move. Earlier, he had dabbled with the idea of selling publishers CD-ROMs containing the names and numbers of college professors. Now he persuaded CMG's board to fund a project called Booklink Technologies.

Talk about being in the right place at the right time. Anticipating Amazon.com, Booklink aimed to exploit the Web by selling books to college professors through their PCs and a telephone line. To make the project fly, Wetherell hired a team of software engineers to build a Web browser. Four months into the project, Netscape launched Navigator. In short order, Microsoft and America Online Inc. came knocking on Wetherell's door. After spending \$900,000 and six months on the Booklink browser, Wetherell sold it to AOL in mid-1994 for stock worth \$30 million, which grew to \$75 million. "That's when David knew he was on to something big," says Peter H. Mills, managing partner of @Ventures, Wetherell's venture-capital unit.

From then on, Wetherell threw himself into the Internet. With half the proceeds from the Booklink sale, he set up the @Ventures fund to take leading stakes in Internet startups, beginning with Lycos. He began spending long hours on the Web. In quick succession, he launched a host of subsidiaries to provide key infrastructure for emerging e-commerce: Engage Technologies to develop targeted direct-marketing tools for the Net, ADSmart to sell online advertising, Planet Direct

(since renamed MyWay.com) to provide customized news and information to Internet service providers, and NaviSite to provide the computer gear and links to manage other businesses' Web sites.

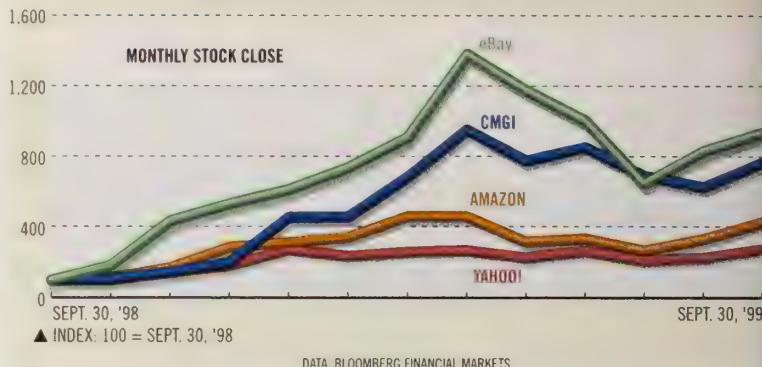
But CMGI directors balked at the burn rate of Wetherell's money-losing ventures, which consumed \$5 million a month—a huge commitment for a public company with negative operating cash flow of \$4.7 million in fiscal 1996. "Dave had in mind that they could all be linked and somehow be successful, but it was not clear to those of us sitting on the board," says

Avis, one of two outside directors at the time. Wetherell had doubts himself at times. Although Lycos was a hot IPO in 1996, a year later the stock had plummeted 73%, to . On the verge of taking CMGI private, Wetherell was bitterly frustrated. "We felt we had a failed model," he says.

Those doubts have long since disappeared. Lycos' stock bounded in late 1997 on the strength of an analyst's recommendation. That was enough to generate some big institutional investors, marking the beginning of CMGI's wild ride. And Wetherell has not stopped to look back since.

CMGI'S ROCKETING SHARES

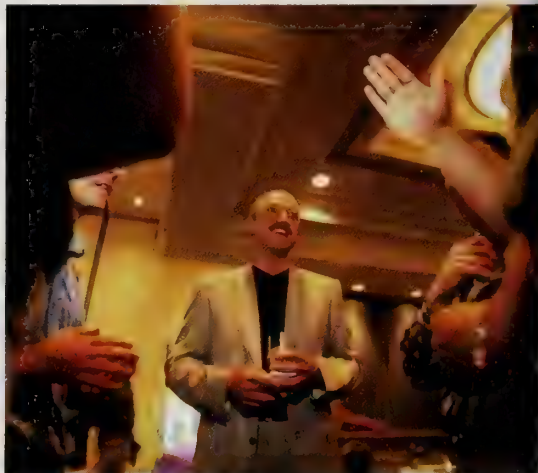
Though less well-known than other Net stars, CMGI is one of the hottest stocks around



Now, to take his company to the next level, Wetherell wants to turn CMGI from its current state of a collection of Internet stock plays into a conglomerate capable of supplying huge array of Internet services to consumers and corporate alike. In another era, he might have been an aspiring railroad baron. But Wetherell's railroad would also own the stations and bistros along the route where people gathered to socialize or do business; it would have a financial interest in the merchants who would sell passengers' wares en route; and would supply the picks, shovels, rails, and rolling stock to others who wanted to enter the railroad business.

VIRTUOUS CIRCLE. At the core of Wetherell's vision is a plan to create a network of interlocking Net companies that work together. He wants each of CMGI's sites to feed its users into the others in a virtuous, ever-growing circle. Wetherell's network draws individual customers through his AltaVista and Lycos portals, which generate the traffic that's crucial to the rest of the enterprise. Popular sites such as Ancestry.com, a genealogy site for families, and investor forum Raging Bull (page 148) form another key component, holding visitors

Cover Story



EAGLE EYE: Wetherell keeps close tabs on CMGI companies with weekly meetings and lots of travel



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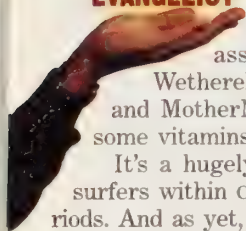
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on the network with content. And having assembled an audience of consumers, Wetherell has e-merchants such as Furniture.com and MotherNature.com to sell them an easy chair or some vitamins.

It's a hugely ambitious plan, aimed at keeping Web surfers within CMGI's electronic grasp for ever-longer periods. And as yet, it remains largely unproven. After all, it's hard to hold people in a network when jumping to the next site on the Web is only a mouse click away. Even the most expansive sites, such as AOL and Yahoo!, don't offer enough to keep users in their confines. "The question is, can CMGI really turn this collection of companies into a network and build a lot of traffic," says Keith E. Benjamin, a partner at Highland Capital, which provides seed money for Internet startups.

Few sites, moreover, have yet figured how to make money off the Web's massive audience. That's why CMGI's most important play is to develop the sophisticated tools necessary for direct marketing on the Net. Not only is Wetherell counting on such targeted marketing to boost ad rates on his own sites; he also figures money can be made selling that capability to other Web sites. Says Bill Miller, director of business development at Intel Corp., which owns 5% of CMGI: "It's a compelling vision, and every month he gets closer and closer."

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At the heart of that vision is profiling technology developed by Wetherell's Engage subsidiary. Since July, Engage has been selling its database of more than 35 million "anonymous user profiles" to 14 CMGI companies, including Lycos and AltaVista, as well as companies outside the fold. Those profiles have been created in recent years as Web users have clicked into CMGI sites such as Lycos. While users have surfed around the site, Engage has tracked their every move, building a record of their behavior. Now, each time one of those surfers arrives at a site that uses Engage, the site can automatically flash ads tailored to the surfer's interests. A consumer who has repeatedly checked out the National Park Service Web site, for example, might automatically see ads for tents and hiking boots when visiting an airline-reservation site.

While it's too early to know if Engage really works, Wetherell calls it "my single most important revelation." But he's not alone. Upstart competitors such as DoubleClick Inc. are moving in at warp speed. With surveys showing that the

average American family now spends 9% of its free time online, the market for Web advertising could explode, growing from a projected \$3.3 billion today to as much as \$33 billion by 2004, according to market researcher Forrester Research Inc. Thanks to a simpler technology, DoubleClick already taken the lead in market profiling. Complicating matters is heated opposition from privacy advocates who worry that Internet profiling violates citizens' rights.

That hasn't slowed Wetherell, who has also bought a host of other Net advertising companies that will expand CMGI's ability to sell ads to many more sites. Flycast and Knowledge, for example, provide tools that enable ad buyers

to locate unsold space on the Net. AdForce's technology, too, is designed to bring together and deliver ads to large networks of sites.

Whatever CMGI's advertising strengths, however, Wetherell still needs to prime the pump of his empire with the most coveted Web asset of all: traffic. That's why after the fallout with Lycos last spring, he bought AltaVista in June. AltaVista's 10 million visitors vaulted CMGI into the No. 3 spot among Web networks.

Now, Wetherell wants to turn AltaVista into a "megaportal," a site that would be a showcase and jumping point for other CMGI properties. Such Wetherell-controlled sites as financial chat room Raging Bull and video and music entertainment site iCar are placed prominently

AltaVista. To ramp up his audience, since August Wetherell has been offering free Internet access, with a twist: Those who sign up must click on an ad now and then to maintain the Net connection. So far, AltaVista claims some 550,000 users have signed

up for the service, but other

attempts at so-called "free" advertising-supported Net access have so far been far from successful.

Just as important, Wetherell needs to pull together the pieces of what has become an extremely complex empire. To stay on top of all the moving parts, he relies on a weekly Monday morning meeting, which brings together the 14 CEOs of CMGI's majority-owned operating subsidiaries and its pending acquisitions. With the West Coast CEOs dialing in by conference call at 5 a.m. their time, Wetherell listens as each gives their briefing. The big-picture questions usually come from Wetherell, while his chief financial officer, Andrew J. Ha-

David S. Wetherell

BORN 1954, Manchester, Conn.

EDUCATION BA, Ohio Wesleyan University, 1976.

ACADEMIC LOW POINT Nearly failing the first computer-programming course he took in high school.

JOB CEO of CMGI, the hot Internet holding and venture-capital company. Its sizzling share price is up 31,500% since its 1994 IPO.

FAVORITE CMGI WEB SITES AltaVista, because the portal is his on-ramp to the Net, and MyWay.com, a service that allows businesses and consumers to make their own custom Web portals.

VALUE OF CMGI STAKE A YEAR AGO \$180 million.

VALUE OF CMGI STAKE TODAY \$1.6 billion.

HOURS ON THE NET EACH DAY Four to five.

HOURS OF SLEEP EACH NIGHT Four to five.

WORST INVESTMENT DECISION Took a pass on becoming lead investor of eBay.

FIRST INDULGENCE AS A MILLIONAIRE Bought an 1888 Steinway & Sons baby grand piano.

LATEST INDULGENCE AS A BILLIONAIRE Bought a Bombardier Challenger personal jet.

HOW HE UNWINDS Poker games, playing jazz on his piano, and bird-watching. Also played first base and catcher with the Arlington (Mass.) Yankees, senior men's baseball league.

FAMILY Married, with two daughters and a son.





Investment *an outlay of money that, for profit or profit 2: capital outlay, also, the sum invested or the property purchased*

investor *an individual who invests in your company and becomes a loyal customer*
investor *a loyal customer who invests in your company and becomes a shareholder*

investor *an individual who invests (money) in order to earn a financial return*

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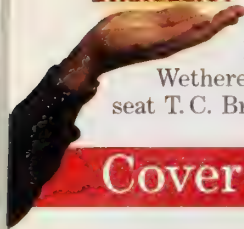
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Cover Story

ducky, takes on to the nitty-gritty details. No CMGI company is immune from Wetherell's scrutiny. He recently put on the hot seat T. C. Browne, CEO of NaviNet, which provides local dial-up connections for ISPs and businesses needing Internet access. Wetherell demanded to know in detail NaviNet's cost structure. It wasn't an idle question. AltaVista's free Internet service depends on NaviNet's low-cost connection. As Wetherell drilled in, Browne laid out the equipment costs for NaviNet. Wetherell's

reaction: Although higher than he would have liked, costs were still well below the \$10.80 that AOL says it spends. "He usually doesn't go for summary answers," says David donian, CMGI's president of corporate development.

Nor does he stay stuck in front of his computer screen. out of every 10 investments CMGI makes are in Silicon Valley companies. So Wetherell makes frequent trips to California. But a quick trip to the West Coast is long enough. A few years ago, Wetherell considered making the big move to the San Francisco area. But with three teenage children, he and his wife, Celeste, decided to stay put. Besides, he says, a little distance from the center can be

ONE BIG HAPPY FAMILY—BUT FOR HOW LONG?

CMG I became a hit with investors as a kind of Internet mutual fund: a way for investors to buy into a broad array of Internet companies through just one stock. But don't tell David S. Wetherell he runs a mutual-fund company. All along, his grand plan has been to harness the collective resources of the CMGI companies by having them share customers, technology, and strategic partnerships to form an Internet *keiretsu*. "It's the optimal business model for the Internet, where speed to getting big is critical," he says.

Sounds swell, but does it work? The answer seems to be yes, at least in the case of one of his biggest hits so far. Raging Bull, the fast-growing online investor chat room, was still being run in a basement by three college students when Wetherell saw it in August '98 while surfing the Web. Impressed with the content and a feature that allowed chat participants to ban people whose comments they didn't like, Wetherell quickly bought 50% for \$2 million.

TEAM PLAYERS. Within a week, Raging Bull had moved to CMGI's Andover (Mass.) offices, and switched its core technology operations over to CMGI's Web-site management company, NaviSite. The four-month-old site, which had been running as a free service financed by the founders' credit cards, immediately began generating ad revenues by hooking up with ADSmart, a CMGI company that links online advertisers with sites.



KILLEEN: CMGI got Raging Bull going "right out of the gate"

Those partnerships proved key, as Raging Bull's audience exploded from 200,000 page views a day in January to more than 5 million by September. With a nudge from Wetherell, both bent over backward to accommodate the fast-growing upstart. NaviSite found the capacity to handle the extra hits, while ADSmart redoubled efforts to sell ads for Raging Bull's rapidly expanding page views. And to top things off, Wetherell made suggestions about changes to the look and feel of the site to make it easier to use. "CMGI had ways to bring Raging Bull into business right out of the gate," says Stephen J. Killeen, who left Fidelity Investments' online trading unit to become Raging Bull's CEO in January.

Now, Raging Bull has morphed into the second most popular online

investor forum, behind only Yahoo! Inc., and it is forging other links within the CMGI network.

A conversation between Wetherell and AltaVista CEO Rod Schrock led to Raging Bull's rapid integration into the CMGI-owned portal, with potential benefits for both partners: more traffic for Raging Bull and an opportunity for AltaVista to increase the length of time portal visitors linger. That's key: The longer Web surfers stick in one place on the Web, the more advertisers will pay a site to run their ads.

Still, some see a harmful side to Wetherell's *keiretsu* approach, since his companies can be pressured to work with partners inside the CMGI network even if that's not their first choice. "There's inherent conflict built into the structure of CMGI," says Jerry Colonna, a former partner with Wetherell's first Internet venture fund. However, other CMGI executives say they have freedom to chart their own course. But "if it makes sense, there is a preference to do business with sister companies, because we all want to see CMGI do well," says Charles W. Berger, CEO of recently acquired AdForce Inc. He'll get no argument from 22-year old Bill Martin, one of the two Raging Bull founders who remain. From where he sits, being in David Wetherell's family of Internet companies looks like a pretty cozy place.

*By Paul C. Judge
in Andover, Mass.*

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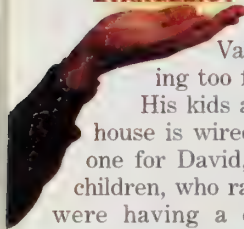



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good thing: "Many of the deals in the Valley are spoiled by too much money chasing too few deals."

His kids are not missing out, either. The Wetherell house is wired with five separate cable-modem lines—one for David, his wife, Celeste, and each of his three children, who range in age from 11 to 15. The Wetherells were having a dinner party last summer when their youngest daughter handed her father an e-mail containing an offer to buy one of her

Beanie Babies for \$500. "Tell her you'll do it for \$750," was Wetherell's fatherly advice. Four e-mails later, and she sold the Beanie Baby for \$620. "She got the bug," he says.

There will be plenty more like his daughter. But even with masses of newcomers logging on every day, both David Wetherell and the Internet are at a big bend in the road. Exactly when sustainable businesses with solid profits will emerge is still anybody's guess. But one thing is clear: Wall Street's patience for funding endless hordes of money-losing

Net firms is waning, and many see a shakeout coming.

Wetherell remains confident that CMGI will emerge on top, and company executives say several of CMGI's operating subsidiaries are on track to show a profit between the third quarter of 2000 and the third quarter of 2001. Will that be enough? His business model is built on the stock market's enormous expectations for the Internet. As long as investors keep paying high prices for shares in his companies, Wetherell will have the currency he needs to keep doing deals. But it doesn't start to produce operating profits, the funding needs to keep the whole empire going could rapidly dry up.

Wetherell knows all about the dangers lurking out there. He loves to tell the story about some birds he once saw on an island off the Massachusetts coast. A peregrine falcon dived through a group of sandpipers, zeroing in on its victim. In a flash, the falcon turned the sandpiper into a puff of feathers. "It's a bird-eat-bird world sometimes," he says. And now it is that truer than on the Internet. The question now is what will CMGI be in five years: a falcon or a puff of feathers?

By Paul C. Judge
in Andover, Mass.

Cover Story

LYCOS: THE CHICK THAT DIDN'T FLY THE COOP

So whatever happened to Lycos? The Web portal, one of the most prominent companies in CMGI Inc.'s constellation, ended up at the heart of a nasty battle between David S. Wetherell and USA Network Chief Barry Diller last spring. Wetherell initially backed a deal by Lycos Inc. CEO Robert J. Davis to sell the portal to Diller in a roughly \$5 billion stock deal. But after Lycos shares dropped more than 40% in the wake of the bid—cutting the value of Diller's offer by as much—Wetherell pulled his support. Arguing that the new price for the money-losing portal was far too low, Wetherell resigned from Lycos' board and used CMGI's 17% stake to lead a shareholder rebellion, eventually forcing Diller to back off.

Today, Davis says he and Wetherell no longer talk strategy as often as they did in the past, but they've buried the hatchet. "We're the two largest Internet companies in Massachusetts," says Davis. "It makes sense for us to have a sound business relationship." Lycos continues to have ties to many of CMGI's other companies, and its performance doesn't seem to have suffered. The portal's audience share continues to grow—it's 29,000 visitors every month make it

the fourth most popular site on the Web, according to Media Metrix Inc. Revenues more than doubled in the fiscal year ended July 31, to \$135 million, although net losses also nearly doubled, to \$52 million. Despite the losses, Lycos shares now trade at around 58, making up most of the ground lost during the fight.

As for Wetherell, the victory was

bility among some Net industry figures. After his extremely public flip-flop, they consider him untrustworthy. "He's more famous now," says George Bell, CEO of Excite Inc., which competes with Lycos and CMGI's newly acquired AltaVista portal. "But do you want him on your board more or less because of that chapter? He failed to show support for the company he invested in."

After vanquishing Diller, Wetherell made no secret that he wanted to tie Lycos in even closer to the CMGI network. Periodic speculation continues that he's interested in acquiring a controlling stake. But the 83% stake he took in AltaVista—for less than half the \$5.3 billion market cap Lycos now sports—makes a bid look unlikely. And for now, Wetherell is refocusing CMGI's efforts on building up AltaVista and solidifying its ties

with his other holdings. AltaVista's managers now participate in the Monday morning strategy sessions Wetherell holds for his wholly owned subsidiaries—something Davis never did. The irony: Lycos never wanted its independence. But increasingly, that looks like the road the company will end up taking.

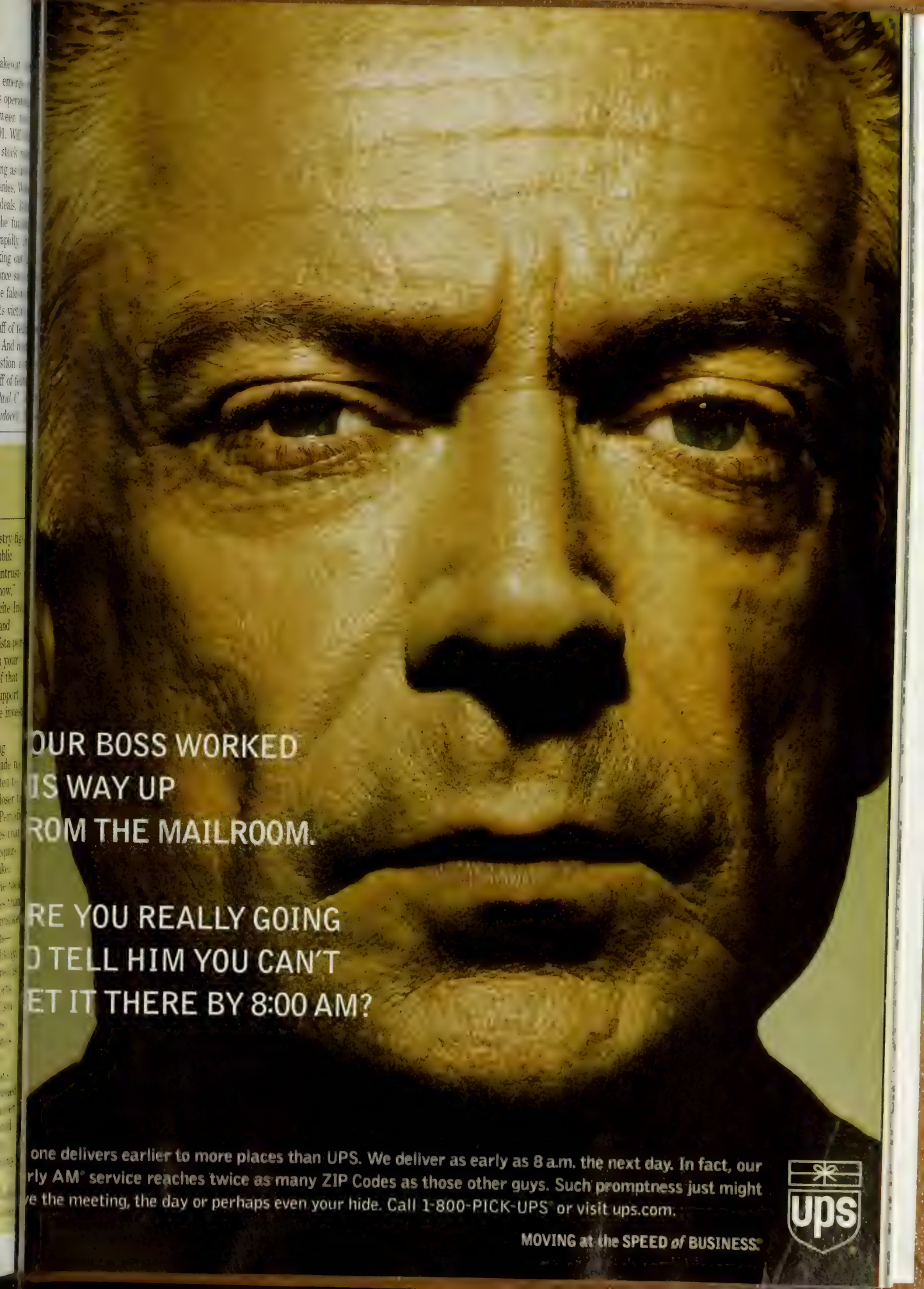
By Paul C. Judge
in Andover, Mass.



DAVIS AND DILLER: Wetherell put the kibosh on the sale

a turning point. CMGI drew attention outside Internet investment circles, and Wetherell enjoyed a moment in the sun as the standard bearer for new media. He prevailed over Diller and his backers in traditional media who, Wetherell said repeatedly, just didn't get the Net—or understand its sky-high valuations.

But in the end, the battle over Lycos also tarnished Wetherell's credi-



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SOFTWARE

A BELATED RUSH TO THE NET

Makers of enterprise software have to play catch-up in becoming Web-worthy

January is a dark and misty month on Sylt, a German resort island in the North Sea. But gloomy Sylt seemed just the place last winter for the annual planning meeting of software giant SAP. The company grew smug in the mid-1990s on a steady diet of success, but now its revenue growth was leveling out at 20%, down from three times that during its heyday. SAP's proud leaders weren't about to give up on their core business: software to run a company's biggest jobs. But during intensive meetings in Co-chairman Hasso Plattner's thatched-roof house, they searched for ways to get their revenues revving again. The answer came from Kevin McKay, CEO of SAP America Inc. "He told us there was no way he would make his sales numbers unless the company shifted and embraced the Internet," says Plattner.

And shift SAP did. After months of frenzied planning, the \$5 billion company rolled out a new strategy last month that it claims is its most important over-

“We were bathing a little too much in our success”

HASSO PLATTNER, SAP co-chief

haul in seven years. By early next year, the company plans to redo its huge array of corporate software in easy-to-use pieces that can be accessed from a simple Web browser. On Sept. 30, it launched a Web site, called mysap.com, where corporations can hook up with other companies to do business. And Plattner plans to spend \$50 million on ads to convince people that SAP is up to speed on the Net.

FERVOR. The Web wake-up call came dangerously late—not just for SAP but also for most of its competitors. Now, Oracle, PeopleSoft, J. D. Edwards, and Baan are hurrying to the Web with the fervor of shipwreck survivors reaching

for a lifeline. These companies are in the business of supplying the large and complex software applications that companies use to manage their finances, manufacturing, inventory, and workforces. During the mid-'90s heyday, most large corporations revamped their internal operations using this so-called enterprise software, creating a market that reached \$16.3 billion last year.

Now, the business is in a stall. Cor-

porate customers have postponed buying enterprise software while wrestling with Year 2000 computer bugs, which SAP Oct. 13 blamed for what it says will be anemic revenue growth of 7% in the third quarter. And the prospect of e-commerce is bewitching customers at diverting spending elsewhere. Enterprise-software license sales tumbled 21% in the second quarter from a year ago. “The tide that floated all boats has gone



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out," laments Craig A. Conway, new CEO of PeopleSoft Inc.

The damage? SAP shares are down about 40% from their high of \$60 last year. PeopleSoft has been pushed to its first-ever layoffs—430 people—and its founder and chairman, David A. Duffield, just resigned the CEO post. J.D. Edwards & Co. has tilted into the red, and Baan Co. has lost \$363 million in the past four quarters. Oracle Corp. alone has been saved from the bloodshed—largely because of its thriving business for database software. Michael J. Donahue, managing partner at KPMG Consulting, predicts that the enterprise market, which raced at 40% growth through the '90s, will recover from this year's debacle to much slower 13% annual growth over the next three years—and with far skimpier net margins than the customary 15%.

To return to better days, the top players have all cooked up strategies similar to SAP's. Namely: to redo programs so they work well on the Web. At the same time, they're branching out into new hot-growth software markets—aimed at tasks such as automating a company's dealings with customers or managing its chain of suppliers and contractors. And like SAP, they hope to set up Web sites where their customers can make contact and do business with suppliers. In short, one-stop shopping for all kinds of software.

GLOATING RIVALS. For these stars of the '90s, the alternatives could hardly be more stark. If they manage to turn themselves into the software link to the Net, they could become veritable giants of the Internet Age. Trouble is, SAP and its ilk specialize in operations inside companies. And the growth markets are those that extend far beyond internal operations. These software makers are



"When we started, SAP didn't have an offering to suit us"

PHIL COUP OF TEXAS INSTRUMENTS

molve Co. The company has spent tens of millions of dollars in the past two years installing SAP's applications. Now Toben is planning to adopt SAP's Internet technology—rather than choosing a company it doesn't know. "SAP is our partner, and we count on them to lead us to the right technology," he says.

HIEROGLYPHICS. It's no small job for these companies to recast their software for the Net. After a decade of producing complex systems for managers who understood arcane computer codes, they must now reach an entirely different audience. In effect, they're aiming to get inside every desktop in a corporation and beyond—through the Web—to a company's suppliers and customers. For this, they must shift from digital hieroglyphics to software as simple to use as clicking on Amazon.com.

At the same time, the enterprise-software makers have little understanding of some of the markets they're entering. One new software market, known as supply-chain management, links together networks of companies that sell to one another. This creates global ties that help coordinate shipments and invoicing between scores of companies as smoothly as if they were one entity. Supply-chain software is already a \$1.4 billion market, led by i2 Technologies Inc. and Manugistics Group Inc., and it's expected to quadruple in the next three years.

Other hot-growth software automates and manages communication with customers through Web sites, call centers, and sales forces. This is Siebel's specialty—so-called customer-relationship management (CRM) programs. It has turned Siebel into a \$500 million company.

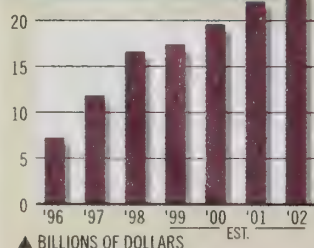
just not expert at programs that manages interactions with a company's suppliers or customers. Already, upstart competitors are gloating. "It's dark, and it's getting worse," says Thomas M. Siebel, CEO of Siebel Systems Inc., the leader in sales-tracking software.

The likely result is a shakeout that could put intense pressure on smaller players such as Baan, which is clinging to a 4% share of the enterprise-software market. Oracle, by contrast, boasts an early lead in Web-ready programs, which should allow it to up its share from the current 13%. And SAP could soldier through the rough times on the strength of its 5,000 programmers and its gold-plated installed base of 12,000 customers. Even after all its troubles, it still has a dominating 30% market share in the core enterprise applications.

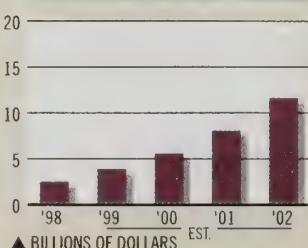
What makes SAP's lead seem so durable? It has persuaded hundreds of customers to place their fate in its hands. Just listen to Edmund D. Toben, chief information officer at Colgate-Pal-

TROUBLED SOFTWARE GIANTS SEEK GREENER PASTURES

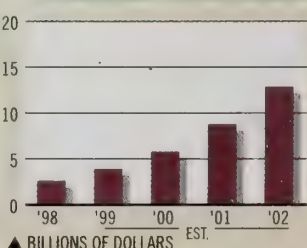
SALES OF ENTERPRISE SOFTWARE ARE SLOWING...



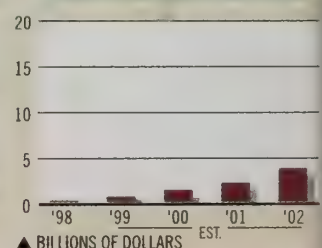
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HOW THE CORPORATE SOFTWARE GIANTS STACK UP

CHALLENGE

SOLUTION

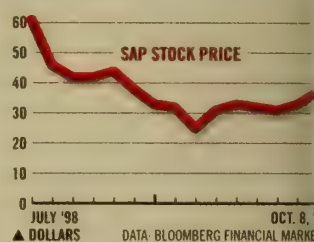
STOCK PRICE

SAP

WALLDORF,
GERMANY

● SAP dominates the business of supplying finance, manufacturing, and human-resources software for corporations with its 12,000 customers and a 30% market share. But its applications are complex, costly to install, and not Web savvy. **Revenues last quarter rose just 8% from a year ago, to \$1.304 billion.**

● A massive overhaul. SAP is aiming to release new Web-based versions of its core software in the next six months. Its Marketplace Web site targets business-to-business e-commerce. If SAP gets this right, it should be able to remain the market leader and get its revenues growing at more than 25% again.



ORACLE

REDWOOD
SHORES,
CALIF.

● Quarterly results have zigzagged as Oracle sales reps have pushed hard to deliver great results in one quarter only to drain the sales pipeline for the next one. **Application sales rose just 11%, to \$548 million, last quarter vs. 24% one year earlier.**

● Oracle took the lead in adapting its products to the Web. Now, it's branching out into customer-relationship-management software. With Oracle Business Online, it sells companies software and charges a fee to run it for them. Look for Oracle to gain market share on the rest of the pack.

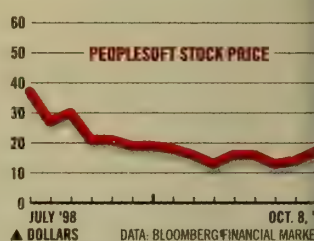


PEOPLESOFT

PLEASANTON, CALIF.

● PeopleSoft was the fastest-growing of the giants. But growth stalled nine months ago. It started off specializing in human-resources management software and doesn't have as broad a product line as the others. **Revenues dropped 2% last quarter, to \$312 million.**

● New CEO Craig Conway is accelerating product delivery. The company's e-procurement package arrived this summer. He just bought Vantive Corp. to help get the company into customer-relationship software. PeopleSoft won't collapse, but its glory days are probably over.

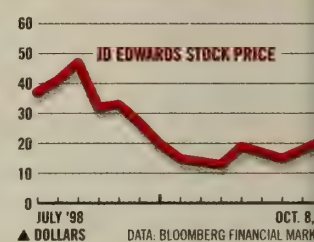


J.D. EDWARDS

DENVER

● The company blitzed past the troubled Baan Co., but then ran into problems of its own. It lacks an A-list of big clients, which leaves it more vulnerable to industry downturns. **Revenues were down 3% last quarter, to \$232 million, and the company lost \$33 million.**

● It is recasting its programs into smaller, Web-enabled applications—the right stuff to peddle to midsize companies. In June, it picked up Toronto-based Numetrix to claw into the hot market for software that manages supply chains. Right now, it's the weakest of the big four.



pany—and one that's growing at a blistering 80% per year.

To win in these markets, SAP, Oracle, and other enterprise companies must not only come up with these products but also unseat the upstarts. Brash new players such as i2 are rich—and they're cozy with the customers that SAP counts as its own. Take Texas Instruments Inc. It uses SAP's finance software, but when it came time to buy a factory planning system, it went with i2. "When we started our project, SAP didn't have an offering to suit us," says TI Vice-President Phil Coup, and TI didn't want to wait around until SAP caught up.

Now, the major enterprise-software makers are aggressively rolling out suites of supply-chain and customer-relationship software. The stock market still respects their clout. When SAP

released its supply-chain products a year ago, i2's stock plunged from 42 to 12.

Despite the initial enthusiasm, SAP has failed to land the expected mega-contracts. Meanwhile, its smaller competitors keep growing. Sales at i2 have soared 75% since the SAP launch, and the stock is at \$53. Crows Gregg McKee, i2's senior consultant for worldwide alliances: "SAP is basically giving its software away, and sometimes they can't even give it away." SAP argues that it has landed about 150 contracts, including Colgate-Palmolive. It confirms that it's deeply discounting some products, but denies it's giving software away.

SAP and most of the former highfliers have been chastened—with the exception of Oracle. The Redwood Shores (Calif.) company seems to have the early lead. Far closer to the Internet epi-

center than its German rival, Oracle moved more quickly to enterprise programs that work on the Web. It's holding up better, with sales growing 32% fiscal 1999, which ended in May. Customer, living.com Inc., a new online furniture retailer, is using Oracle's software because of its Web focus. "Oracle gets the Internet more than a lot of companies," says Andrew Kass, the rector of technology at living.com.

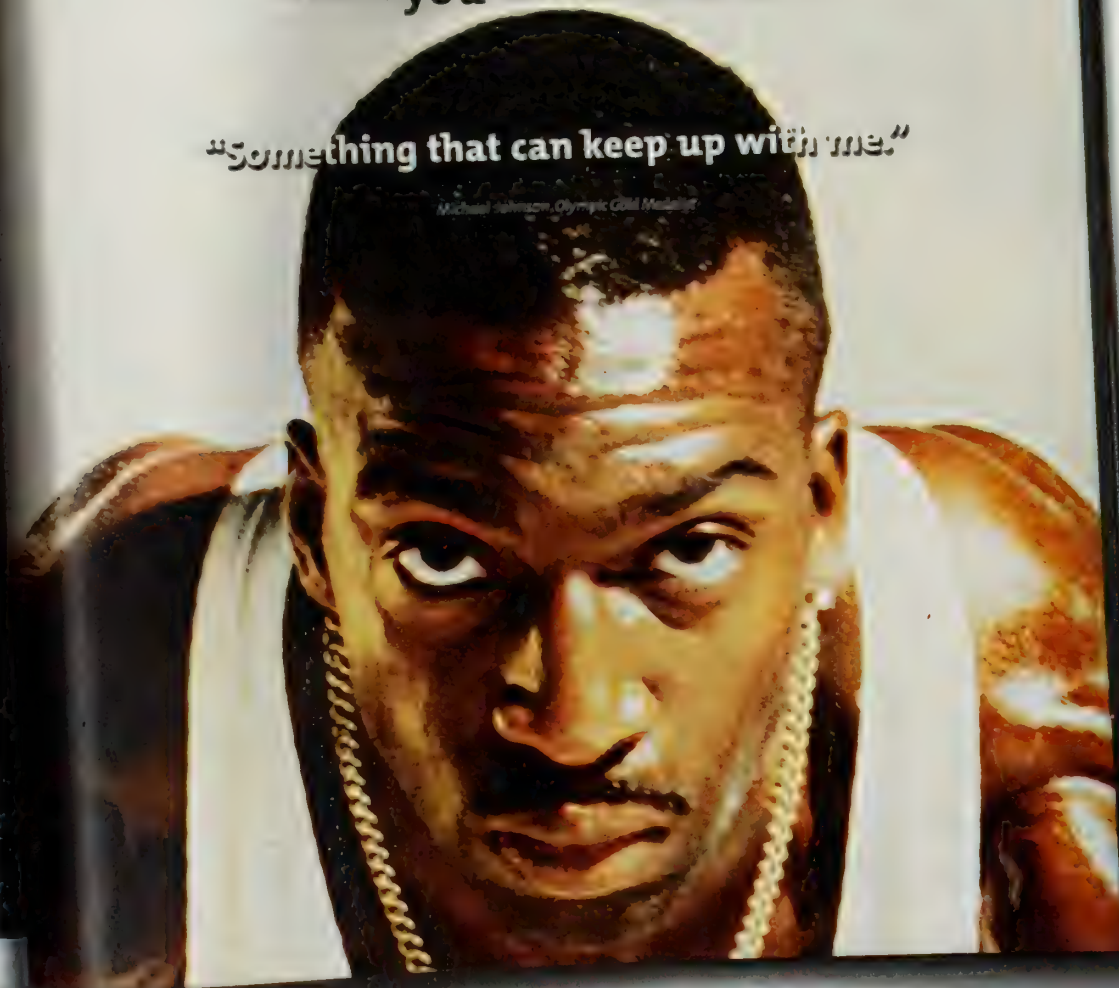
KNITTING UP. Oracle now has its eyes on the booming customer-relationship market. The goal is to wrest leadership away from Tom Siebel, a former Oracle executive. A first version of Oracle CRM software released in June produced an impressive \$45 million in sales in the first three months. Now, 600 Oracle programmers are developing a second version that will be knitted together with



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Michael Johnson, Olympic Gold Medalist



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Information Technology

the company's other enterprise applications: financial, manufacturing, and human-resources software.

In the next three years, Oracle CEO Lawrence J. Ellison is hoping to revamp his \$2.4 billion enterprise applications business. Instead of selling just software and leaving customers to make it work properly, Ellison will run the complex programs himself and charge customers a service fee.

SAP, late to jump to the Internet, is trying to make up for lost time with

mysap.com. The idea is that customers will use the Web site as a place to hook up with their own customers and suppliers and that they will use SAP's software to cement those connections. And, with its own interface software, called Workplace, SAP even hopes to supplant Microsoft Corp.'s Windows. Says Plattner: "We want to own the desktop. We have the right. We have the experience. We have the history."

But can they move quickly enough? For a decade, SAP and the other enter-

prise-software giants rode the corporate restructuring wave. To survive and grow in the next decades, they must speed up their offerings and operate in Internet time. But the Web won't give them long to learn how to surf.

By Stephen Baker in Paris and Stuart Hamm in New York

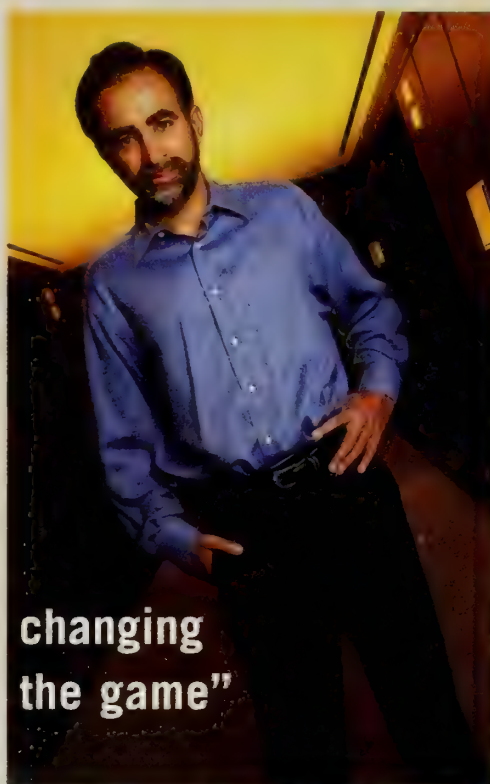
BusinessWeek **ONLINE**

For a profile of SAP's Kevin McKay, see www.ebiz.businessweek.com

i2: THE EARLY BIRD GETS THE MARKET

A year ago, the outlook was bleak for i2 Technologies Inc., the leading supplier of software for connecting manufacturing companies with their suppliers. Mighty SAP, the king of corporate software, was launching a competing product. J.D. Edwards & Co., Oracle Corp., and other software giants were also entering the fray. Wall Street felt i2 would be crushed, and it sent the company's stock price tumbling from 42 to 12.

So much for the conventional wisdom. Sales at i2 spurted 53%, to \$146 million, in the quarter ended Sept. 30, and the company's net income soared nearly threefold, to \$10 million. Its share price is now at a record high of 53. "People thought



"The Internet is changing the rules of the game"

SANJIV SIDHU, FOUNDER OF i2

SAP would freeze the market, but i2 kept rolling on unfazed," says analyst Larry Lapide of AMR Research in Boston.

QUICKER, SIMPLER. Chalk it up to i2's headstart. Its customer list is topped off by hypercompetitive high-tech manufacturers such as Dell Computer and Compaq Computer that are unwilling to wait for SAP or others to get their software up to speed. Also credit the Web: It has put a new emphasis on supply-chain software—since executives are searching for ways to use the Net to make their interactions with suppliers quick and simple. "The Internet is changing the

rules of the game," says Sanjiv S. Sidhu, the founder and CEO of i2 in Irving, Tex.

For customers transforming their operations into e-businesses, i2's software is vital. It helps Dell synchronize its component orders with production schedules. Meanwhile, Texas Instruments Inc. uses i2 software to manage the production and shipment of 120,000 semiconductor orders each month.

The biggest strength at i2 is its technological lead. Even Kevin McKay, CEO of SAP America, concedes the technology in the forthcoming update of his company's supply-chain

software is still six months behind i2's. Legg Mason Wood Walker Inc. analyst Christopher Desautelle calls even that concession an exaggeration. "i2 is light-years ahead, and the other guys aren't going to be able to catch up," he predicts.

At i2, the marketing approach has been as important as the technology. Instead of promoting technical specs, i2 pledges to help companies save money. The company gets paid based on the results its software produces. So far, i2 has delivered a cumulative \$7 billion in savings, according to Miller-Williams Inc. in Atlanta, a market researcher. "That message really resonates," says Doug Kaewert, a vice-president at Sun Microsystems Inc., an i2 customer.

Now, Sidhu has aggressive new ideas to expand into new industries, including automobiles and retail. On Oct. 12, he outlined plans to set up Web marketplaces linking retailers with their suppliers and customers. But he's also got to keep up with nimble upstarts such as Syncra Software Inc. in Cambridge, Mass., whose software allows buyers of materials and their suppliers to compare sales forecasts. "There's no limits to their technology, but as with any big company, they'll hit roadblocks," says Tim Andraea, a Syncra vice-president who formerly worked at i2.

Right now, though, i2 is flying high. For Sidhu, whose 37% stake in i2 is valued at \$1.5 billion, the outlook is anything but bleak.

By Steven V. Brull in Los Angeles

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FOOTBALL

TAGLIABUE ON THE NFL TODAY

The commish talks about the new Houston team, corporate ownership, and not launching a TV network



PARITY AT WORK: Kansas City's defeat of Denver demonstrated why the NFL is so hot—anything can happen

These are glory days for the National Football League. TV ratings remain high. Only a couple of star quarterbacks have been sidelined by injuries. And on Oct. 6, the league awarded the latest expansion slot to Houston, hauling in a record \$700 million franchise fee.

But the NFL isn't problem-free. In choosing Houston for the 32nd franchise (page 164), owners bypassed Los Angeles, leaving the nation's second-largest TV market still without a team.

NFL Commissioner Paul Tagliabue faces other pressures: clubs seeking to sign their own, rich marketing deals and rumblings about rival football leagues. Last week, Tagliabue met with *BUSINESS WEEK* editors and spoke about the state of the NFL.

Q: What doomed Los Angeles' bid for an NFL franchise?

A: A combination of political competition...and economics. [But] the business community just never got interested.

Q: Prices for NFL teams have been escalating faster than in any other major sports league. For the Houston team, Robert McNair paid \$700 million, 10 times what franchises were selling for 15 years ago and higher than record prices paid recently for franchises in Washington and Cleveland. Why so much?

A: The difference between the Cleveland price [\$540 million] and the Washington price [about \$600 million, plus the cost of buying the Redskins stadium] and this price grows out of a couple of very clear things that McNair has: a multipurpose stadium that can be used 365 days a year. Neither Cleveland nor Washington did. There will be a lot of additional revenue out of the stadium. Number two, we committed [to] a Super Bowl, which gives him the ability to give his suite holders and his club-seat holders and his season-ticket holders value that Cleveland and Washington can't deliver because they're not going to host Super Bowls.... The third thing is, he's in a state where football is king.

Q: Any concerns the Raiders may be plotting a move back to L.A.?

A: [The Raiders have] a very long-term lease in Oakland.... I don't think it will be very easy to get out of, especially with Jerry Brown as mayor.

Q: Would the Raiders owner, Al Davis, be welcomed back in L.A.?

A: Most of the public says, hell, no. I guess there are some people

who feel that Al Davis is now at long end of his life and it seems the Raiders are going to be the Raiders without Al Davis. That's more palatable to some people.

Q: With prices rising, do you foresee change in NFL policy barring corporate ownership of franchises?

A: I've been giving the same answer that for 30 years [since he was league attorney]: I don't know. I think the lesson you can draw from the experience of the other sports is that...the corporations interested in buying in do because they think there is some business synergy. Who buys an NBA team Comcast. Who buys a baseball team

Fox. We think we're heck of a lot better having an arm's-length relationship with media companies. If you look beyond that, what have you got? I'm sure we want a Coca-Cola owning a team. You're better off having a relationship with Coca-Cola and the flexibility to deal with Pepsi and others.

Q: The NFL has embraced revenue-sharing more completely than



THE COMMISSIONER: Houston was promised a Super Bowl

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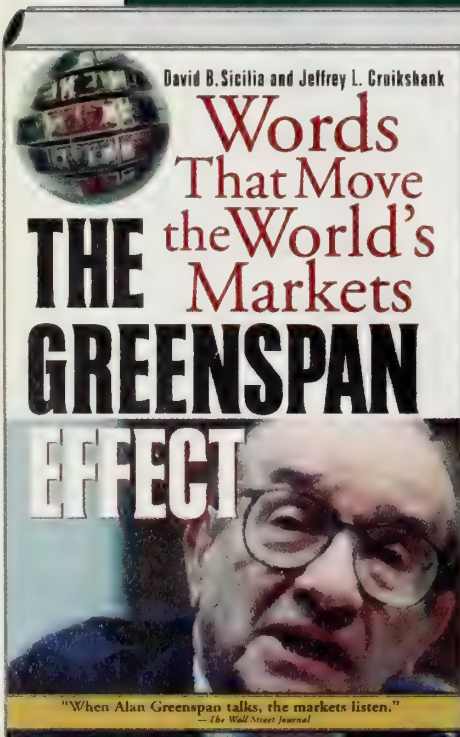
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the other major sports. Yet some owners want a free hand to strike their own marketing deals. Is this a concern?

A: If you take all the marketing opportunities and throw them back to the teams, it has a huge impact on [individual teams'] ability to get players. In turn, that has a destabilizing effect on the competitiveness of where we are a league.

If San Francisco, Dallas, and the Dolphins—just to take a hypothetical—Nike teams having marketing relationships with Nike, [then] Cincinnati, Buffalo, and Green Bay are left with—pick it—Wegmans [Food Markets] Buffalo, which is the Bills' biggest marketing deal. Guess what? Players go to play for Miami and San Francisco.

Q: The National Basketball Assn. recently announced plans to launch a television network. Any thoughts of restructuring the NFL's TV in a similar way?

A: The question is: Why restructure if you have the networks paying a premium [for NFL games]? I would not as a business want to have the risk that have been willing to take in recent years. They've taken it for reasons of their own: building audience, building capacity for other programming. A lot of times you're better off sticking to your knitting and being a rights provider and a licensor.

Q: Atlanta and Denver, last year's Super Bowl teams, have been flat this year—a combined 2-8. Is that a problem?

A: It's obviously not good for the league. Among other things, we get them on *Monday Night Football* about six times. But it's a fluke. It's really an outgrowth of injuries and the retirement of [Denver QB John] Elway.

Q: NBC and Turner say they're exploring a rival football league and other also are planning to take on the NFL. Do you take these ventures seriously?

A: I take it seriously because television has grown to the point where there's a huge vacuum cleaner for programming and it's continuing to grow. On the flip side of the coin, there is much competition out there now for the sports dollar. I think you have to have high appetite for speculation and risk to add your product to the marketplace.

For a longer version of this interview,
see the Oct. 25 issue online at
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Seventeen years ago, McNair had a business in bankruptcy and \$1 million in debt

McNAIR AT HIS HORSE FARM IN PARIS, KY.

tel, car-rental, and other taxes, returning pro football to Houston for the first time since the Oilers left for Tennessee after the 1996 season. "Bob McNair was the guy who had the class, the clout, and the cash to put this thing together. I don't know of another human being in Houston who could have done it," says Jack M. Rains, former chairman of the Harris County-Houston Sports Authority.

The deal isn't likely to produce strong returns for McNair in the short term. But "if you assume he sells 10 or 15 years from now, team values have skyrocketed, and everybody will pay a billion or a billion a half then," predicts Marc S. Ganis of portscorp Ltd., a Chicago firm that franchises. In the biggest NFL franchise sale until now, the Washington Redskins sold in May for \$800 million, that included the stadium.

Patience and a knack for spying opportunity are second nature to McNair, who grew up in North Carolina. After dabbling in insurance and advertising sales, the psychology major from the University of South Carolina was lured to Houston by a friend's promise of a \$3,000 loan to start an auto-leasing business. "Houston is a can-do city. They recognize your ability rather than your pedigree," says McNair, whose father was a salesman for Sunshine Biscuit Co.

"GOOD NAME." After building up his auto-leasing business, McNair moved into equipment-leasing and trucking. By 1982, overleveraged and squeezed by competition, part of the trucking biz was in bankruptcy, with about \$1 million in debt. McNair says creditors were eventually paid 100¢ on the dollar. "Because he had his good name and reputation, he came roaring back," says Rains.

Did he ever. In 1984, McNair jumped into independent power generation just as partial deregulation of the electricity market was creating a niche for smaller players. He first planned a \$15 million co-

generation plant in New Jersey. "By the time I got through with it, it was \$130 million," recalls McNair, who brought in such heavyweight partners as Enron Corp. and General Electric Co. "He was very committed and tenacious and just kept working at it and working at it until he got it done," says Enron CEO Kenneth L. Lay.

At the time of a planned public offering last year, McNair's Cogen Technologies Inc. was operating three plants with an estimated \$450 million in gross annual revenues and \$65 million in net income. But given the uncertainty of the market, McNair, who owned 82% of the company, grabbed a \$1.4 billion offer from Enron to buy most of Cogen's assets.

The deal has left McNair with plenty of free time to pursue his sports interests—which include horse racing and a 1,500-acre farm in Kentucky. He owns the nation's top two-year-old filly, Chilukki, who is undefeated after six races. He vows to create a "first-class organization" in football, too.

The still-unnamed team starts playing in 2002, and McNair plans to bring in financial partners to cut his stake to 30%. "I'll leave the coaching to the coaches," he promises. But with such a hefty investment, odds are that Bob McNair won't be sitting quietly in his skybox.

By Wendy Zellner in Dallas

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LECOM

HERE COME SMART PHONES

They're the next big thing, offering wireless Net access

A 15-year-old girl strolls through London's Berkeley Square. Suddenly she hears a beep from her cell phone and looks at the screen. A message sponsored by Starbucks informs her that two friends in her "buddy list" are walking near—Would she like to send them an in-it message to meet for coffee at the next Starbucks around the corner? merely has to click "yes" on her

smart phone to send the message. And she gets an electronic coupon worth \$1 off a Frappuccino.

Does it sound like an e-commerce fantasy? Hardly. Such a scene could happen in London next year. That's because, from Tokyo to Stockholm to Silicon Valley, telephone companies, software designers, and phone-equipment suppliers are all revving up their strategies for the next technological rev-

olution: wireless access to the Internet. Already in Europe—and to a limited extent, in the U.S.—customers can dial in to receive e-mail, weather reports, and other specialty packages via their cell phones. By next year, tens of millions of users in Europe should be linked to the Web all day long. All they have to do is keep their cell phones on. "It will be the exception when you're not connected," predicts Petri Pöyhö-

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a manager of radio access systems Nokia Networks. In Japan, some 3 million cell-phone users are already staying continuously connected to the Net (page 178).

Clearly, some tantalizing visions of wireless Net may fizzle in the marketplace. Applications may be too unduly for a handheld machine. And the data costs should be moderate—about 10 cents for most downloads—many users may object to the likely blitz of advertising and keep their pocket computers switched off. Still, a portable constant link to the information world could change lifestyles—and offer business opportunities—just as much as Web has up to now. The Japanese government predicts that its domestic wireless market, tied in to the Web, will be worth \$130 billion in annual rev-

enues by 2005. Europe's could be three times larger.

From AT&T to Sony Corp., companies are staking out their claim to the mobile Net, fueled by fear that their competitors will get there first. It was Sprint Corp.'s coveted mobile network, and the prospect of turning it into an extension of the Internet, that led MCI WorldCom to buy Sprint on Oct. 5 in a \$115 billion deal. Meanwhile, Nokia Corp., Motorola Inc., and others are rolling out Web-surfing smart phones this fall. Media heavies such as CNN, ESPN, and Reuters are marketing news nuggets. And software companies, from mighty Microsoft to startups in Stockholm and Milan, are devising pocket-size applications for the new mobile Net.

All these companies have

their eyes on Europe. That's because the old world is quickly becoming the biggest laboratory for introducing leading-edge Internet services. It is just as likely to be a battleground for companies scrambling to get a piece of the action. Foreigners and locals alike are pouring research money into Europe. Lucent Technologies, Texas Instruments, Japan's NEC, and Canada's Nortel Networks are all beefing up mobile phone operations on the Continent.

TURNED TABLES. For Europe, it's a rich opportunity. The race for the wireless Internet offers the Continent its best chance yet to launch its own tech-driven New Economy. In the 1970s and 1980s, Europe missed out on the personal-computer revolution as its protected national champions Bull, Nixdorf, and Olivetti got creamed by Americans. In the 1990s the Continent lagged in Internet development.

But when it comes to mobile phones, the positions are reversed: America trails, its market fractured by competing wireless standards. Europe, meanwhile, has steamed ahead, powered by its common standard for cellular communications, known as GSM. The standard has since spread to 120 countries, from China to South Africa.

To serve this fast-growing global market, a powerful industry has sprung up. Finland's Nokia has rocketed to world leadership in handsets. Britain's Vodafone has become the world's first global cell-phone provider since it outbid Bell Atlantic for San Francisco-based AirTouch early this year in a \$65.9 billion deal.

Supplying these stars is a huge industry, ranging from French-Italian chipmaker STMicroelectronics to Symbian, the London-based software joint venture linking Ericsson, Nokia, Motorola, and Japan's NTT DoCoMo. Symbian's new operating system for wireless Internet phones is going head to head with Microsoft Corp.'s Windows

EUROPE HAS AN EDGE IN THE NET-PHONE BATTLES

LEADING CELL-PHONE MAKERS Finland's Nokia is the world's No. 1 cellular-phone brand, from the U.S. to China, with a quarter of the global market and half the profits. The Continent boasts other strong contenders, including Ericsson and Alcatel.

WORLDWIDE OPERATORS Britain's Vodafone has become the first truly global mobile-phone operator since its January buyout of the U.S.'s AirTouch. Other Europeans are coming on strong, including Germany's Mannesmann and Spain's Telefónica. They will have to take on rivals such as AT&T, Yahoo!, and Japan's NTT DoCoMo.

SOFTWARE DEVELOPERS Spurred by the success of companies such as Nokia and Vodafone, software startups catering to the mobile industry have been sprouting up around Europe. Some design specific systems for following traffic or weather, while others are putting together custom-made products for corporations, linking sales forces with mobile phones to company Intranets.

SEMICONDUCTOR MAKERS Europe's strength in mobile phones is luring the global leaders in chips to the Continent. Texas Instruments and Lucent have both based their key manufacturing operations for the mobile phone business in Europe. They're working alongside Europe's STMicroelectronics, Philips, and Siemens to supply the mobile industry, from handsets to base stations.

SMART CARDS Europe leads in these credit-card-like devices, which will soon become key payment tools for e-commerce over smart phones. France's Amplus and Schlumberger are world leaders in the design and production of smart cards.

DATA BUSINESS WEEK



RIDING HIGH

25-year-old Swede Per Mosseby owns a hot startup making phone Web pages

The U.S. will challenge Europe's lead in the mobile market—and Japan is already making inroads

CE. That challenge has spurred Microsoft to invest in wireless companies in Europe, including STNC, a Cambridge-based microbrowser company, and Sendit, a Stockholm company specializing in mobile phone e-mail.

Now the wireless Internet offers Europe new opportunities to expand its high-tech industrial base. By 2003, analysts expect much of the Continent to follow the example of Finland, where more than 6 out of 10 people own cell phones. If that happens, 248 million Europeans would own them, up from 141 million today. Most of these phones will be capable of tapping in to the Net. Add it all up, and the mobile Internet could soon have the old world swaying to a California beat: European companies and their foreign rivals could pour even more money into developing new products and services. And venture capital, already trickling into Europe, could start to gush into startups in software and Web appliances.

ANSWERING CALLS. To see where Europe could be heading, take a look at Scandinavia. Engineering students in Stockholm used to head for the laboratories of Ericsson and Nokia after graduation. Now they're setting up companies, signing development agreements with the phone giants, and answering calls from eager venture capitalists, including foreigners such as Britain's 3I and Alta Berkeley Associates. "Companies that would have had trouble raising \$1 million a year ago are raising \$10

million today," says William Cardwell, managing director of Eqvitek Advisors in Helsinki.

One hot Swedish startup is Melody, founded a year ago by 25-year-old Per Mosseby and financed in part by Norwegian telephone company Telenor. Mosseby, who dropped out of a masters program in computer science to start his business, now has a 21-person team developing phone Web pages for Scandinavian businesses. Eventually, Mosseby hopes to pioneer "location technology" that will help local businesses such as corner sandwich shops grab customers by sending messages to their phones as they pass by. "I want to hire a CEO," he says, "so I can focus on business creation."

Melody's older competitors are already making their debuts on the northern stock exchanges with an eye to listing later on Germany's Neuer Markt and Nasdaq. Nocom, a Stockholm company that prepares mini corporate Web sites for transmission on cell phones, started listing its shares on the Stockholm exchange in January. The stock has jumped from \$5.35 to \$16.25. "We want to be up and running with mobile sites before November," says CEO Anders Jonson. The next step: follow partners Nokia and Vodafone into global markets.

These Scandinavian successes are already spilling over into the rest of Europe. French startup Webraska sells up-to-date images of Paris' traffic jams,

which pop up on commuters' cell-phone screens. Ubiquity, a developer in Milan, is equipping Italian banks with bank-by-cell-phone software. This march to the mobile Internet, says Tim Sheedy, telecommunications analyst at International Data Corp., "gives Europe the opportunity to catch up to the U.S." tech-related fields.

Of course, the Europeans face stiff competition from the Americans, the reigning kings of the Internet. From Cisco to 3Com, they're maneuvering to grab big chunks of the global mobile business. In early October, 3Com signed a deal with Amazon.com Inc. to develop wireless shopping for Palm Pilot—or of the strongest competitors Europe's smart phones face.

THIRD GENERATION. Perhaps the biggest battle will rage over the so-called mobile portal. This is the online screen that phone users go through as they hunt for information, from sports scores to movie listings. Phone companies are angling to control the portal, an advertising gold mine. But here they face competition from cash-rich U.S. powerhouses Yahoo! Inc. and America Online Inc., which are already developing phone offerings. They know that in a few years the number of cell phones tied in to the Internet could far exceed online PCs.

Japan also stands to challenge Europe's lead in the mobile market. Long isolated from the rest of the cell-phone world by its unique standard, Japan has

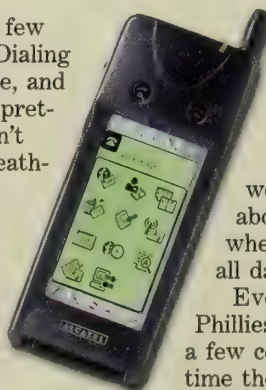
TAKING A NET PHONE FOR A SPIN

For the dawn of the mobile Internet, it's not much to look at. I'm in the Paris offices of Alcatel. And after a couple minutes of clicking menu options on a normal-looking cell phone, I have the image of a small grey ring on a tiny screen. It's Paris' ring road, le Boulevard Périphérique. The darker sections signal traffic jams. But I wouldn't take a detour based on the blurry spot.

The first generation of mobile computing is likely to appeal largely

to geeks—along with a few million Scandinavians. Dialing up the portal takes time, and the surfing choices are pretty slim. The choices don't go much beyond the weather report and stock quotes. What's worse, each call racks up chargeable minutes on the cell-phone account, which cost from 10 cents to more than a dollar.

Things should improve fast. Ericsson and Alcatel are coming out with much bigger screens later this year, and phone companies will be rolling out all sorts of services. But I



ALCATEL'S WEB TOUCH
At this point, the choices don't go much beyond the weather and stock quotes

won't be phone-surfing until about this time next year. That's when we'll be able to surf data all day long without making calls.

Ever a fan of the Philadelphia Phillies baseball team, I'll gladly pay a few cents for a short message each time they win a game. And if I can figure out a way to scroll down BUSINESS WEEK e-mail on the phone, maybe the company will spring for the \$500 machine.

By Stephen Baker in Paris



When you call up and say you're a small business, do some businesses make you feel, well, um, small?

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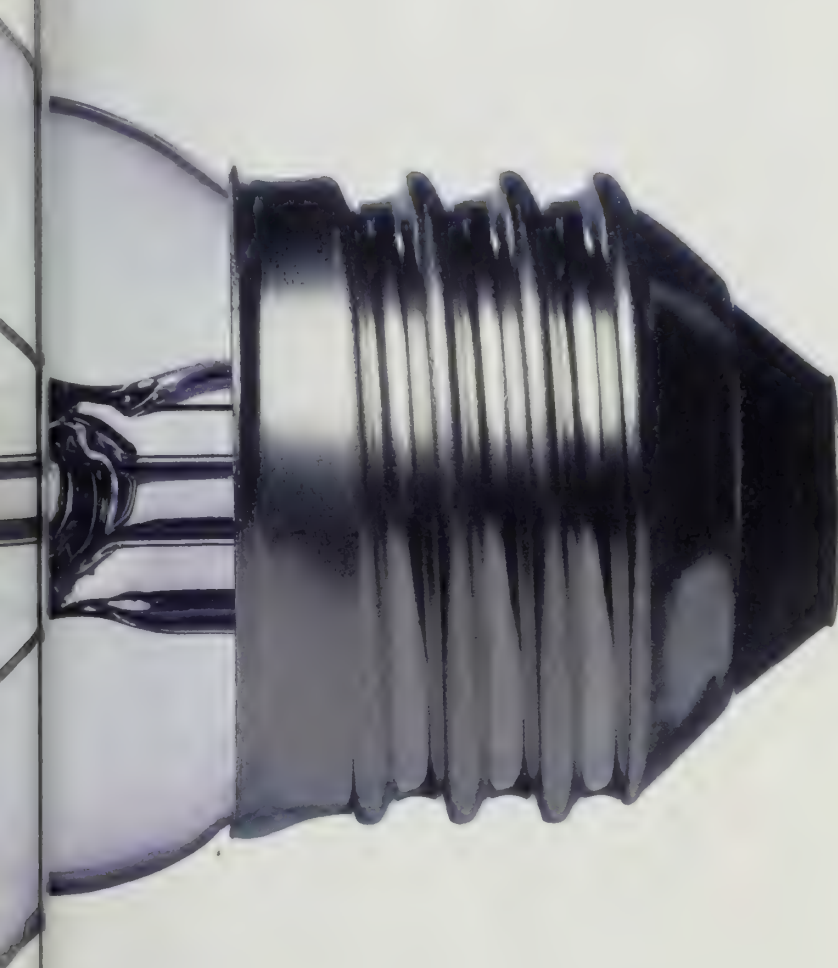
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barely made a dent globally. Now, though, Japan is leading the drive into mobile data with a popular wireless Internet service introduced seven months ago by NTT Mobile Communications Network. And in 2001, Japan will be the first market to leap into the "third generation" of mobile telephony. 3G, as it is known, is a high-speed data technology that will reach a blinding 2 megabits per second by 2003—40 times faster than an average dial-up modem. It will pave the way for videoconferencing, stereo Web surfing, and virtually any mobile service for which markets can be found.

LOOKING GOOD. 3G will give Japan a headstart on global expansion in the mobile Net market. Even now, the Japanese are pouring R&D money into Europe to gain position. In a laboratory outside Paris, Matsushita Communication Industrial is teaming up with Nortel to experiment with cell phones that can offer videoconferencing, video-game playing, and music downloading. "Japan is going to knock the pants off everyone when it comes to 3G," boasts Seiji San-

da, founder and CEO of Japan Communications Inc., a cell-phone service reseller.

For now, the Europeans, Americans, and Japanese are racing to develop the right machines for today's more rudimentary mobile Internet services. Nokia's first offering is a bulb-headed phone called the 7110, priced at \$500. It's fitted with a browser for WAP, or Wireless Application Protocol—a standard that converts Web pages to fit onto mobile phones. The phone features a rolling scroll key under the screen. Ericsson and Alcatel are coming out later this year with offerings featuring fold-down keyboards and larger screens.

The phones are good-looking gadgets, but for the time being, they offer ho-hum services. Mobile surfers can dial in to a server for Zurich stock quotes, Madrid weather forecasts, or schedules for the Frankfurt bus. But the service is slow. In Helsinki, it takes .10 seconds to get a stock quote via wireless Internet phone.

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Far livelier services coming soon. By spring, phone companies around Europe will be testing transmission systems to keep smart phones on

constantly. With data dispatched packets, the way the Internet does, users will no longer have to make phone calls to transmit. The phone, a corporate intranet terminal, will simply shuttle data back and forth all day and night, whenever it's on. This forces phone companies to come up with new ways to bill, while providing them with new platforms for advertising. And it should turn the data phone from a gimmick into a tool. "That's what smart phones will go mainstream," predicts Kent Thexton, a marketing director at Britain's BT Cellnet.

STEP BY STEP. The Europeans have settled on a step-by-step rollout of mobile Internet. As phone companies upgrade their transmission stations to handle data, wireless Internet service will move to broadband video and stereo by 2003. That will provide

The current phones look good, but they offer lackluster services and can take a long time to connect to the Net

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steady jumbo market for equipment suppliers, led by Ericsson, Nokia, Nortel, and Lucent. Analysts estimate that the demand for GSM transmission equipment will reach \$15 billion this year. The market will likely double within five years.

SLOW MOVER. With each jump in sophistication, phonemakers aim to market pricey new handsets. Nokia, for example, plans to issue new, top-of-the-line phones every year. The com-

pany's latest data phones, the 7110s, won't allow the continuous Internet access that will be technically possible next year. For that, consumers will require another Web-surfing machine—one that will probably cost somewhere between \$500 and \$1,000. If that sounds outrageous, consider that European executives already change their phones about once a year as a matter of course.

In contrast to Europe and Japan, the

U.S. is likely to move more slowly set up a wireless Internet world. It take five or six years for the Americans to catch up with their overseas competitors. That would give European companies half a decade—a lot of time at Net speed—to strengthen their global market position. Success could be a few billion phone calls away.

By Stephen Baker in Paris, Irene M. Kunii in Tokyo and Steven Brull in Los Angeles

'I'M ONLINE ALL THE TIME, AND IT'S FREE'

It's lunchtime in Tokyo's Ginza district, and Namiko Sugiyama, a 28-year-old legal secretary, grabs her Internet-ready cell phone and heads outside. As she meanders, she clicks on the Net menu, then on e-mail, where she scrolls through the dozen or so messages friends have sent. She moves on to headlines and scans for breaking news, a service that costs her less than \$1 a month. "I learned about the nuclear accident right away, long before I would have seen it on TV news," Sugiyama says of the Sept. 30 calamity northeast of Tokyo. "I'm amazed at how useful the Internet is."

She's not the only one. Since the advent of Internet-capable phones seven months ago, some 3 million Japanese have purchased handsets and signed up with mobile carriers. It's nothing short of a revolution: After trailing the U.S. and Europe, Japan has emerged as a front-runner in wireless Net communications. In the next two years, the number of Japanese accessing the Web with smart phones will exceed 20 million, according to a recent industry report. That compares with 17 million computer users who have gone online in the past five years. "Japan already has more than 50 million mobile phone users," explains Keiichi Enoki, gateway business director for



NTT DoCoMo, the country's largest wireless operator, with 27.3 million subscribers. "The cellular phone has emerged as the ideal Internet-access tool."

It helps that Japan makes the world's smallest, most function-packed handsets. Take Sugiyama's model, purchased for \$115 when she signed up last April with DoCoMo's "i-mode" service, which serves two-thirds of wireless Net-phone subscribers. A featherweight 90 grams, the device fits in her palm and boasts a crystal-clear LCD screen that's half again as large as what she had before. There's an answering service, a schedule book, and a memory bank for 500 phone numbers and 50 e-mail messages. Most important is its Internet capability, which provides a constant Web connection. "I'm online all the time,

and it's free," raves Sugiyama. Actually, she's charged a token fee of a few dollars a month for the Internet connection. By contrast, a 24-hour online connection over a leased fixed line in Japan would set her back at least \$360 a month. With i-mode Sugiyama is charged only for the volume of packet data downloaded or transmitted.

Like most Net-phone users in Japan, Sugiyama checks her e-mail frequently. She scours real estate sites for an apartment and orders books through Kinokuniya, a chain that, like thousands of other businesses, has created a Web

site with small-screen text. DoCoMo adds the cost of any service or purchase to her monthly bill.

This is just the start of Japan's Net-phone wave. In March, 2001, DoCoMo will launch its "third generation" service based on the standard known as wideband CDMA. That allows lightning-fast data transmission and high-quality video communication. Since Europe will adopt the 3G standard a year later, Japan could be a key place to watch the new era in wireless communications dawn.

By Irene M. Kunii in Tokyo

CELL CRAZY

In Japan, 3 million have signed up for Net phones in only seven months

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Some unusual mail has been landing on Rhoda H. Karpatkin's desk. "We've been getting a lot of offers to be acquired recently," says the president of Consumers Union, publisher of *Consumer Reports* magazine. Karpatkin won't say who is sending these overtures to her office in leafy Yonkers, N.Y. But they are peculiar: Consumers Union is not-for-profit, so who would want to buy it?

It's not hard to see why suitors might try. Not only does *Consumer Reports* sell a hefty 4.4 million copies each month, it also has a dot.com business that any publisher would envy. Since its launch two years ago, consumer-reports.com has attracted more than 330,000 subscribers who pay either \$24 a year or \$3.95 per month, and it's adding 7,000 new subscribers per week. What's more, 90% of them don't already take the print product. This bible of

consumerism is one of the few print publications, along with The Wall Street Journal Interactive Edition, that has built a workable subscriber model online (table, page 186). Already offering extensive archives, free information, and chat rooms, the site will soon expand to include Web-only content such as surveys of online shopping sites.

To some enterprising media mogul, *Consumer Reports* might have the makings of a juicy profit center if it abandoned its not-for-profit stance. But

OCTOBER, 1999

KARPATKIN:

"We are very single-minded...we serve the consumer"

Karpatkin says the site is already profitable just with subscriptions she says. And flattered as she is by the at-

tion, Karpatkin says neither she nor the board is thinking of selling out at this level. There's no doubt in Karpatkin's mind that the magazine's steadfast editorial independence is the reason for its appeal. Says Karpatkin: "We are very singleminded about who we serve. We serve the consumer."

Indeed, not much has changed about *Consumer Reports'* mandate since it was launched in 1936 "seeking to create a magazine that would maintain decent living standards for the most intimate consumers." Paul W. Nogle, who follows Web companies for Hearst, says that Karpatkin & Quist in San Francisco, recently used the site with his wife to buy a cell phone. "I think the real key to its success is that people believe it's unbiased and it's objective," Nogle says. **CLEAN LINE.** That independence has taken on even more significance as cyberspace blurs the line between commerce and content. Online car-shopping services such as Microsoft Network's carpo.com and msn.com offer ratings similar to *Consumer Reports'*, comparenet.com helps shoppers sift through prospective purchases, and one of this year's hottest startups, epinions.com, calls itself "the ultimate online shopping guide." Nogle offers *Consumer Union's* independence. Still, will their free content chip away at *Consumer Reports'* franchise? *Consumer Reports* "may be not-for-profit, but the real question is: What is the business model going forward?" says J. William Gurley, a partner at Benchmark Capital, one of the venture firms backing epinions. "They still need to pay for what they do."

So far, that's not a problem. Neither is

the heat of competition nor the lure of Internet riches fazes *Consumer Union*, says Karpatkin. In 1998, a sharp former corporate lawyer who

TRIED AND TRUE

As cyberspace blurs the line between content and

commerce, independence seems all the more valuable

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MAY, 1936

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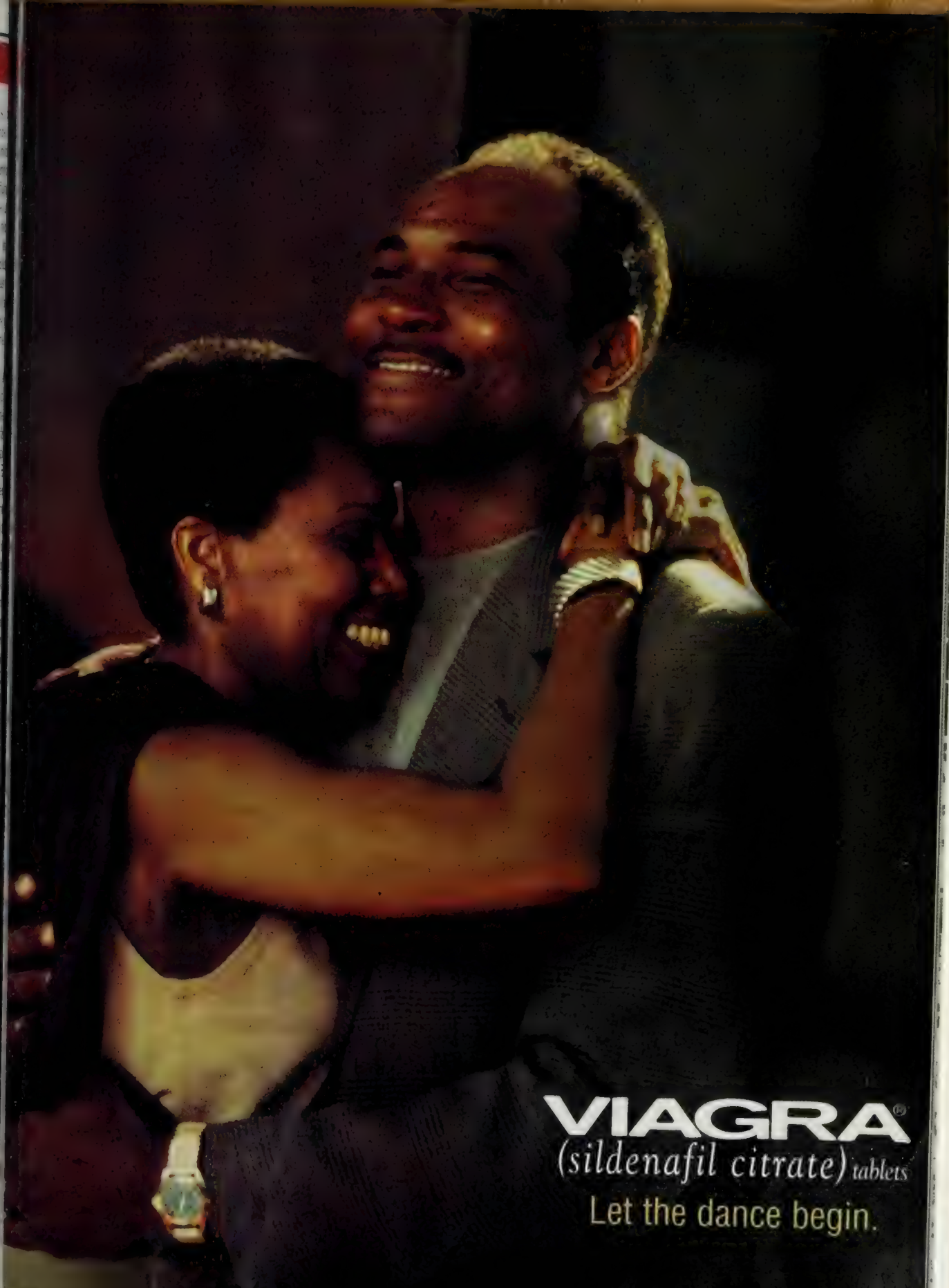


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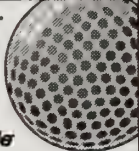
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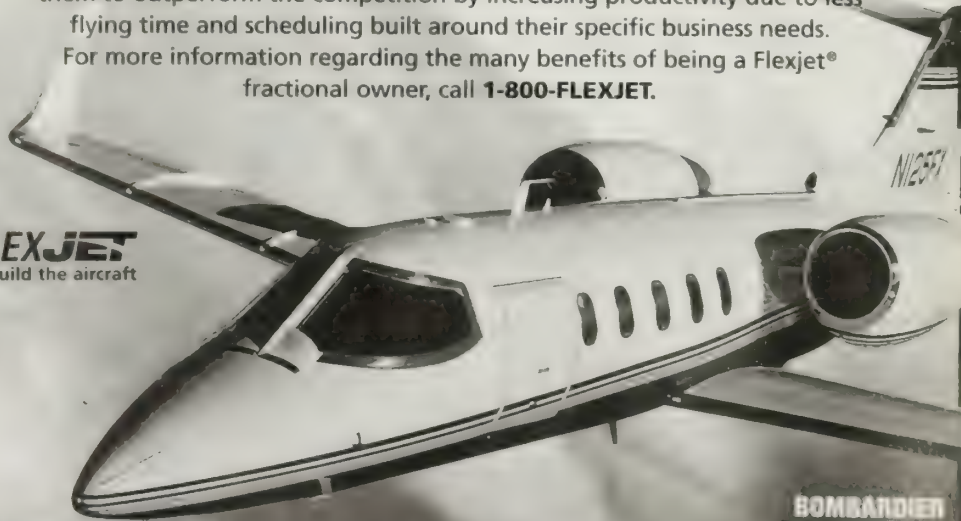
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doubled the magazine's circulation during her 25 years in charge. Although she maintains that *Consumer Reports* is "as excited about making money as anybody," she believes that any commercial relationship would undermine the organization's mission. It's the same reason why all of the products the magazine tests are purchased in stores by a clandestine army of 160 "shoppers." "We don't pull punches," says Karparkin. "We have great strengths in antagonizing various interests."

NO WAY. Isn't it possible to perform a public service and make money by separating editorial from the commercial side of the business? And though sometimes conflicts arise that require skillful navigation, does that mean all commercial links are sellouts? After all, one media banker estimates that a Web service with *Consumer Reports*' numbers could be worth at least \$500 million if it were able to exploit other revenue streams besides subscriptions. Any money reaped from unlocking that value would certainly boost Consumer Union's current budget of roughly \$140 million a year—allowing it to buy and test even more products. On the other hand, consumers may be willing to pay more for content

when they know there are no ads. "It's not better or worse [to sell ads], it's just a different economic model," says Fayne Erickson, publisher of *Ms.*, a for-profit magazine that sells no ads.

But in the realm of online consumer guides, commercial ties are growing.

PAY-PER-READ

Who is attracting Web subscribers?

PUBLICATION	SUBSCRIBERS
CONSUMER REPORTS	330,000
WALL STREET JOURNAL INTERACTIVE	306,000
THESTREET.COM*	90,000
CYBER.PLAYBOY.COM	30,000

*Web only—no print version

DATA: COMPANY REPORTS

That's the case with epinions, which was started by a group of twentysomething self-described "Internet veterans." Rather than test products in-house, epinions' notion is to create a worldwide community of product reviews. Charlatans trying to foist biased reviews onto the

site, says Gurley, are quickly found because visitors to the site rank the fulness of reviews and identify those whose opinions they most trust. product reviews might actually be one of the few online areas where advertising makes sense. After all, says Gurley, the best time to sell an ad to people is when they're about to make a purchasing decision."

What no rival service comes close to boasting about, however, is Consumer Union's storied testing facility. It consists of 50 laboratories spread over 100 acres in Yonkers (plus a test track for cars in Connecticut) where products are potted soil to biking helmets to dishwashers and breakfast cereal painstakingly put through their paces.

Amid the cyberfrenzy of linkups and cross-selling, Consumer Reports serves as a reminder. "People are willing to pay for content on the Web," says the media director Nancy Macagno, "because of our name and because the content is deep." But the more profit-hungry Web rivals catch on to *Consumer Reports*' appeal, the harder it may be to fend them off without playing the commerce game.

By Richard Siklos in Yonkers, N.Y.

America's New Century

What direction will the future take

Where are we headed? At **THE LIPTON EXPERIENCE 2000**, food industry executives have been invited to raise their eyes beyond their aisles and look closely at the nation and people they serve. Will the market fall? Will consumer choice grow still wider? Is brand loyalty growing or declining? What will be the impact on the grocery/food sector? Created by Lipton and *Business Week*, this farsighted gathering will welcome top thinkers on the American future. Food industry leaders, economists, and political pros will join in a no-holds-barred open discussion — an informed briefing on the issues that will drive this industry in the next decade.

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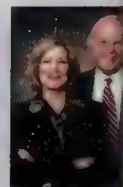
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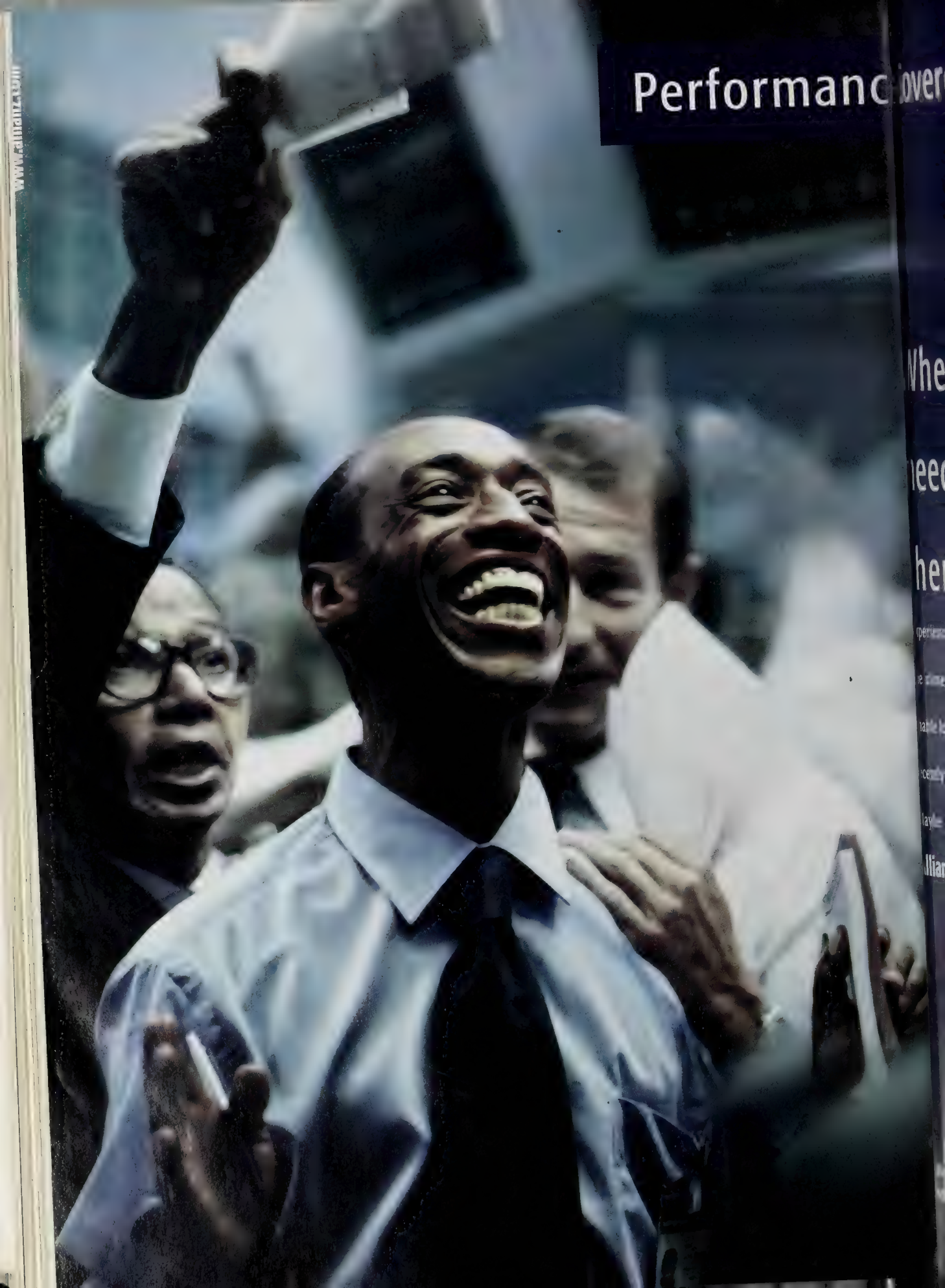
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BusinessWeek Lifestyle

Pain Is More Than a Symptom

More clinics focus on the relief of suffering

BY CATHERINE ARNST

If you think life is one long vale of tears, full of pain and suffering to be borne stoically, then read no further. Most people, though, are grateful for any pain relief they can get. The problem is, they are not getting enough. The scandal of our advanced health-care system is that chronic and acute pain are habitually undertreated.

Recent studies have found that 40% to 50% of cancer and AIDS patients and two-thirds of nursing home residents are undertreated for chronic pain, even though effective analgesics are available. One recent study found that some 41% of elderly disabled U.S. women with severe pain take little or no medication to relieve the suffering. "Undertreatment of pain is a huge, huge problem," says Dr. Russell Portenoy, chairman of pain medicine at Beth Israel Medical Center in New York. "As pain clinicians, we see the failures of the health-care system on a daily basis."

BIG BREAK. It doesn't have to be that way. Many major hospitals around the country have come to recognize that pain should be treated as a disease in and of itself, and are establishing pain clinics staffed with specialists who focus solely on the relief of suffering. That's a big break with medical tradition, which emphasizes treatment of the underlying disease or injury rather than its symptoms.

Pain clinics also break with another medical tradition—reluctance to prescribe morphine, even though it can virtually eliminate severe pain such as postoperative and cancer pain. Despite its proven effectiveness, morphine and other narcotics such as methadone, codeine, and demerol are chronically underutilized because of a huge fear of addiction on the part of doctors, patients, and state drug regulatory boards.

But study after study shows that this fear is misplaced—the risk of narcotic addiction at the dosages prescribed for pain management are minimal to nonexistent. Although patients may develop a dependence on opiates to control pain, it is no different than relying on a drug to treat high blood pressure. Dependence does not equal addiction, with its constant craving for more and more "fixes." If managed properly, the most serious side effect of opiates tends to be constipation. Most patients on morphine can function fully and even drive a car safely. Still, the myth

of addiction, combined with concerns about criminal misuse of narcotics, continues to limit their use, laments Dr. John Farrar, a neurologist at the University of Pennsylvania Medical Center: "I think to deny access to narcotics to people in pain is absolutely criminal."

Undertreatment of pain is not just a quality-of-life issue. Prolonged pain can rewire the entire nervous system, causing patients to fall victim to lifelong, chronic pain that is less likely to respond to analgesics. Just ask Rose Katz-

man, a 65-year-old former real estate broker in Manhattan. She has spent the

past decade in agony from a condition called arachnoiditis, damage to the nerves in the spinal cord from unknown causes. On her worst days she is in agony from the most innocuous stimulus. "If material touches my arm, it can go off the wall," she says. She tried a number of doctors and powerful drugs, to little effect. "The doctors treat you like you're an addict; they say don't be a baby," she says.

It wasn't until 1996, when she started seeing Dr. Portenoy, that she gained some relief—from a drug many people would be horrified to even consider. Portenoy prescribed methadone, typically used to wean addicts from heroin. "Now my life has some sort of normalcy," she says.

Pain clinics are particularly well suited to sufferers of chronic pain like Katzman. Hard to treat conditions such as chronic back pain, sciatica, arthritis, and neuropathic pain, caused when nerves are damaged, demand innovative approaches. A pain clinic will assess the degree of suffering and develop a multidisciplinary, tailored approach involving anesthesiology, neurology, psychiatry, and physical therapy.

NEW DRUGS. Pain clinics also treat suffering patients and often, ignoring the standard practice of doling out analgesics on an as-needed basis. They don't just prescribe narcotics, either. There are a whole range of new pain treatments available, including antidepressants, which can sometimes relieve pain whether or not the patient suffers from depression; the new co-

Health



Specialists in the treatment of pain are relatively quick to prescribe drugs such as morphine, because they know the fear of addiction is overblown

s that mitigate arthritis suffering without of the side effects associated with aspirin; capsaicin, a cream made from a red pepper tincture that can lessen skin sensitivity.

One of these newer treatments is as effective as morphine, but they may have fewer side effects or be more suited for specific ailments. Gabapentin, for example, an epilepsy drug sold under the brand name Neurontin, is used by specialists to treat diabetic neuropathy, an irritating condition that arises when diabetes damages nerve endings. The drug does not completely eliminate the pain, but it has few side effects. Gabapentin "has been very effective in

improving things like sleep patterns, energy levels, the ability to do more things with the family," says Dr. Keith Edwards, director of the Neurological Research Center in Bennington, Vt.

That's no small benefit. Pain is a vicious circle. The more debilitating the suffering, the more depressed and incapacitated the patient becomes, so the pain continues to worsen. If you find yourself falling down this black hole, you don't have to grimace and bear it. "Once patients know something can be done," says Edwards, "they have a whole fresh outlook on life." That alone is enough reason to seek out aggressive pain therapy. □

The Truth About Treating Pain

MYTH Patients should expect to feel pain as part of the healing process and should just tough it out.

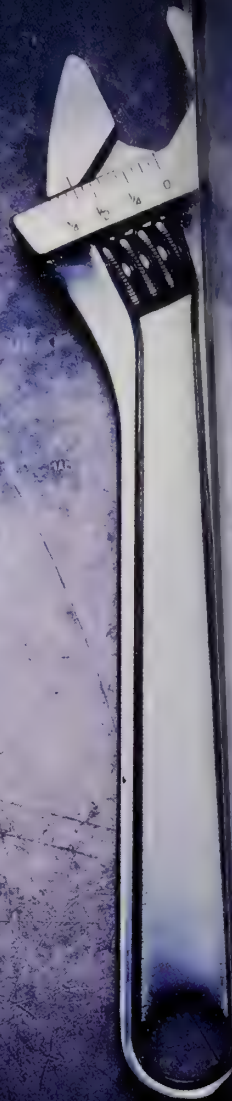
FACT Pain can interfere with healing and can rewire the whole nervous system, causing lifelong suffering.

MYTH Narcotics such as morphine, codeine, and demerol should only be used as a last resort, and in minimal doses, to avoid addiction.

FACT When taken for pain treatment, narcotics are rarely addictive.

MYTH Treat the underlying cause, be it disease or injury, and pain will go away.

FACT Pain can be a disease in and of itself. With neuropathic pain, the nervous system has gone haywire, sometimes for no known reason.



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The Kindest Cut?

Thermal surgery may treat many ailments



BY JANET
RAE-DUPREE

After innumerable sleepless nights lying beside her blissfully snoring husband, Susan Douglass was at wit's end. So the wife of Delphi Ventures partner David Douglass issued a challenge. "You're Mr. Medical Device venture capitalist," she said one day in 1995. "Why don't you invent a device to do something about your snoring?"

Her timing couldn't have been better. David Douglass was working with two startups that were

using radio-frequency-generated heat

to shrink enlarged prostates and burn away liver tumors. Could the same technology be used to quiet his nocturnal din? Doctors were intrigued. Within a year, Douglass became one of the first patients to take advantage of a radio-frequency probe developed by Somnus Medical Technologies (800 250-6031), a venture that resulted from his wife's challenge. In a procedure done in a doctor's office, the probe was used to shrink tissues at the back of his palate and around nasal passages. "I got treated with my Hermes tie on, and there wasn't a platelet of blood," he recalls.

Douglass is one of a small, but growing number of patients benefiting from relatively inexpensive medical treatments harnessing the power of heat. Instead of cutting and stitching, surgeons using thermal tools and endoscopes can

apply a probe to ligaments, tendons, and other tissue, burning it away or reshaping it into a tighter package if it has been slackened by age and overuse. The probe itself usually isn't heated but emits radio waves that can warm tissue up to 180F. Because the procedures are less invasive than traditional surgery, they are relatively painless, usually require only local anesthesia, and recovery is quicker.

MORE TOOLS. Insurers generally pick up the cost of thermal surgery if it treats an ailment that's already covered. Still, some doctors are hesitating, concerned that heat-sculpted tissue may not wear as well over the years as tissue left in its natural state. "The long-term success is not totally proven," warns Dr. Jon J.P. Warner, chief of the Harvard Shoulder Service at Massachusetts General Hospital. In addition, debate persists over which patients would benefit. "I don't have a hammer now, and we want to continue figuring out which nail to hit," Warner says. Indeed, most of the procedures are so new that clinical studies go back only a few years.

Despite these concerns, thermal surgery is being used to help patients suffering from conditions such as varicose veins, chronic back pain, worn-out shoulder ligaments, and even urinary incontinence (table). Researchers are experimenting with thermal treatments for such life-threatening ailments as congestive heart failure, asthma, and emphysema.

The approach uses a principle known to leather tanners for centuries: Connective tissue shrinks when heated. This results from heat's impact on collagen, a fibrous protein that makes up 90% of the organic material in most of our tissues. A collagen molecule resembles a stretchy coil spring. When heated, the bonds keeping the spring taut are released, and it snaps into a jumbled coil, shriveling the tissue. In some cases—such as in varicose vein surgery using a probe from VNUS Medical Technologies (888 783-8346)—that's all surgeons aim to do. Instead of removing the collapsed vein, surgeons rely on the body to absorb it and reroute its blood flow elsewhere. In shoulder surgeries, a probe from Oratec Interventions (800 784-6060) emits radio waves that tighten tissue surrounding the shoulder joint. As the patient heals, the body weaves stronger collagen around the framework.

Costs tend to be sharply lower than that of traditional procedures because most thermal sur-

geries require only tiny incisions and are done on an out-patient basis. Back patients who undergo a \$7,000 thermal surgery that shrinks bulging discs usually can return to work within a week or two. In comparison, patients who undergo the traditional alternative—a \$50,000 procedure called spinal fusion—must be hospitalized for up to five days and often must take months of work. For these reasons alone, thermal surgery likely will remain a hot topic for years to come.

How Thermal Surgery Works

BACK PAIN Shrinks bulging discs and kills sensitive nerve endings.

HEART PROBLEMS Burns away excess tissue that can cause arrhythmias. May tighten damaged muscle following heart attack.

LIVER CANCER Burns cancerous cells without destroying nearby healthy tissue.

CHRONIC SNORING Opens nasal passages and tightens loose tissue at the back of the palate.

LOOSE SHOULDER JOINTS Contracts collagen in overtaxed ligaments, pulling shoulder capsule snugly around joint.

VARICOSE VEINS Causes problem veins to collapse in on themselves.

This Ball Is on a Roll

For rehab and fitness, giant vinyl spheres hit the spot

BY KATE MURPHY

Carla Meyer got on the ball a year ago when she hurt her back stooping to pack a suitcase. "A chiropractor suggested I do exercises on this ball to fix the problem instead of repeatedly coming into his office for adjustments," says the 43-year-old Los Angeles mother of two. After a few days using a large, vinyl ball to stretch and strengthen her back muscles, she resumed playing tennis and running. "It only took 15 minutes a day, but what a difference it made," Meyer says.

Low-tech and inexpensive, giant exercise balls are the latest in rehabilitation and fitness equipment. Various known as physioballs, Swiss balls, and posture balls, these 11- to 70-inch diameter plastic orbs were first used in Switzerland in the 1960s to improve the motor skills of disabled pediatric patients. They worked so well on kids that therapists started using them to treat adults with orthopedic or neurological problems.

The lightweight, pliable, and often brightly colored balls rolled into a few physical therapy clinics in the U.S. in the late 1980s but are only now coming into widespread use—and not just to treat disorders or injuries. "The ball has incredible fitness and conditioning applications," says Dr. Nicholas DiNubile, an orthopedic surgeon specializing in sports medicine in Havertown, Pa.

NO SLOUCH. Unlike doing floor exercises or reps on Nautilus equipment, working out on a ball requires balance, which means "you've got to recruit deeper muscles involved in the stabilization of your joints," says Craig Liebenson, a Los Angeles chiropractor.

practitioner

ARCH ANGLE

"The ball has incredible fitness and conditioning applications," says a surgeon

tor. These muscles are rarely challenged, even by pro athletes, and are the common culprit in most knee, ankle, neck, and back injuries. They are also why fit people can get hurt doing something as mundane as sneezing.

Typical exercises include push-ups with legs suspended on the ball, crunches with the back teetering on the ball, and leg lifts with the ball squeezed between the ankles. But just sitting on the ball is beneficial—which is why some people use them as office chairs. Since every breath you take slightly alters your center of gravity, "you have to continually work the deep muscles in the pelvis and spine to maintain balance,"

says physical therapist Joanne Posner-Mayer, who in 1990 founded Ball Dynamics International in Longmont, Colo., the leading distributor of exercise balls. Sitting on a ball also demands good posture, she says, because "if you slouch, you fall off."

Beyond treating injury and promoting overall fitness, balls can enhance athletic performance. They're

LEG LIFTS

Working with the balls enhances balance, posture, and coordination

standard equipment in the training rooms of the Denver Broncos, New York Yankees, Detroit Red Wings, and other teams. Golfers Tiger Woods and Jack Nicklaus have used exercise balls to improve their games. Because the balls develop coordination as well as strengthen core muscles in the torso, DiNubile says, athletes "greatly enhance their fundamental power" to kick, throw, swing, and jump.

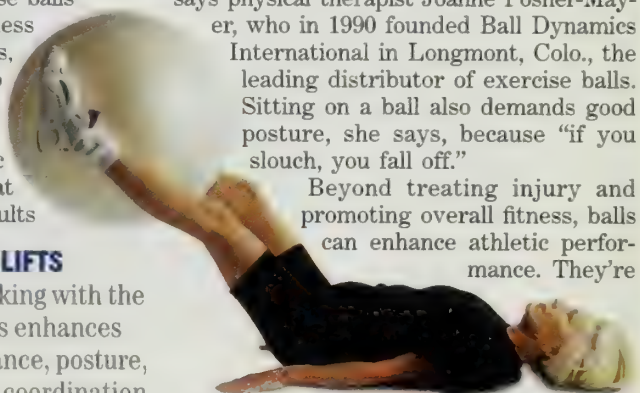
Exercise balls cost \$10 to \$180, depending on size. Some come with a hand pump, which is convenient if you want to pack your ball to take on a trip. Balls are available through back-care shops and specialty suppliers, such as Ball Dynamics (800 752-2255, www.ballodynamics.com).

The same sources also offer videos and books to demonstrate exercises, but it's helpful to have an athletic trainer or physical therapist make sure you are using the ball correctly. Health insurance may cover such sessions if you have a sports injury or back problem for which a doctor can write a prescription for therapy. Using a ball, you'll bounce back in no time at all.



CRUNCH

Ball exercises hit deep muscles rarely used by pro athletes



BROKERLESS
STOCK-BUYING,
THE BARKER
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BusinessWeek Investor



No-Sweat Direct Investing

New Web services make it easier to get started

BY MIKE McNAMEE

For many stock buyers, even online discount brokers aren't cheap enough. When you're building a portfolio \$300 at a time, a \$14.95 commission puts a serious drag on your return. So small-scale Warren Buffetts have traditionally bypassed brokers by turning to companies that sell their stock directly to the public. Direct investing is indeed cheap—but it exacts a toll through hefty paperwork, cumbersome bookkeeping, and tax-return nightmares.

But all over the Web, services are now springing up that make direct investing easier (table). Share shoppers can find searchable databases that spell out all the many details of companies' direct stock purchase (DSP) plans or dividend reinvestment plans (DRIPs). In some cases, companies allow

Web services to provide electronic prospectus and online enrollment, taking some of the hassle and much of the delay out of getting started. They also tackle one of the biggest barriers to DRIPs—the need to acquire at least one share of

company's stock so you can enroll. First Share, for example, can link up a newbie who needs an initial share in, say, PepsiCo

with a seasoned investor who has a share to sell.

But direct investors still depend upon the kindness of corporations: Companies must choose to offer direct access to their stocks. DRIPs, which existing shareholders collect dividends in shares instead of cash, have long been popular with utilities and banks—companies that have heavy capital needs and a desire to court small investors.

DSPs, which allow one-time or periodic stock purchases without a broker, are widening the

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reach of direct investing. Offered by only 30 companies in 1994, DSPs are now available from 570 corporations, rapidly catching up with DRIPs, which are offered by 882 domestic companies and some 300 foreign ones offering American depositary receipts. But many popular companies—including most issuers of high-tech stocks—still don't want the expense of setting up and running a DSP or DRIP.

The latest Internet offering attempts to clear that hurdle. In early November, Netstock Direct, an online DSP enrollment service, will unveil ShareBuilder, a site where investors will be able to sign up for automatic weekly or monthly investments of fixed dollar amounts in specific stocks.

These plans are for small investors who are willing to undertake the complicated accounting themselves

Bypassing Brokers via the Web

SITE	DESCRIPTION
DRIP INVESTOR www.dripinvestor.com DRIP CENTRAL www.dripcentral.com	Informational sites featuring searchable databases on dividend reinvestment plans (DRIPs), articles, and links to direct-investing newsletters and Web sites
NETSTOCK DIRECT www.netstockdirect.com	Online enrollment for 350 direct stock purchase (DSP) plans; ShareBuilder, allowing regular investments in 200 stocks at \$2 per purchase, is coming soon
TEMPER ENROLLMENT www.directinvesting.com	Offers enrollment and first-share purchase for DRIPs for \$20 plus price of share
FIRSTSHARE www.firstshare.com	Matches new investors who need a share to enroll in a DRIP with someone willing to sell; \$12.50 to \$17.50

The service plans to start with about 200 of the largest and most active issues—including such names as Microsoft, Cisco Systems, and Dell Computer, none of which offer direct investing now.

By pooling its customers' orders into one weekly purchase, ShareBuilder can charge just \$2 per purchase for each stock selected, says Netstock Chief Executive Jeff Seely. Custodial accounts for children will pay just \$1 per transaction. The service will also track all your ShareBuilder stocks on one statement, rather than the quarterly flood of mailings from DRIPs and DSPs, where each stock's plan creates its own paperwork. Netstock Direct also will offer immediate sales of ShareBuilder stocks, for a fee of about \$20. In contrast, traditional direct-investing plans can take days to sell shares.

ShareBuilder keeps what Seely calls the biggest advantage of DRIPs and DSPs—fractional shares. A customer who puts \$200 into each stock could get 2.119 shares of Microsoft, 1.655 shares of America Online, and 2.614 shares of Intel, after paying \$6 in commissions. Fractional shares are vital, Seely says, for "dollar-cost averaging"—investing a fixed dollar amount in a particular stock on a regular schedule. Studies have shown that dollar-cost averaging boosts returns by keeping funds fully invested and by helping investors ac-

quire stock at a low average price. But "brokers won't take orders for fractional shares on a standing order to buy a dollar amount of shares each month," says Seely.

Actually, one broker comes close. Charles Schwab offers a plan called Stock Builder, which mimics company-offered DRIPs. Schwab customers can reinvest dividends from any New York Stock Exchange or Nasdaq-listed company by buying additional shares—including fractional ones—without commissions. About 30% of Schwab's customers use the plan. Other brokers offer more services. Fidelity Investments' online broker, for example, will enroll customers in DRIPs offered by companies whose shares they own.

DOLLAR DAYS. Direct investing may be getting easier, but it's still not painless. While direct investors sidestep brokers' commissions, companies charge a variety of fees. Wal-Mart Stores' has a typical schedule: \$20 to enroll, a \$250 minimum initial investment (waived if a buyer agrees to invest \$25 a month for 10 months through an automatic debit plan), and a \$1 fee plus 10¢ per share commission on each purchase. A \$500 automatic-debit order would net 9,685 shares at a price of \$2. Wal-Mart also charges \$20 to sell shares from a DSP account. "We recommend companies that don't charge fees," notes John Sandfort, marketing vice-president for Temper Enrollment Service, which buys initial shares and handles paperwork for new DRIP investors. But that narrows the number of plans to 700.

Direct investors also will spend some of the savings on accountants—or aspirin. "The hassle with these plans are often underplayed," says Michael Crawford Scott, editor of the American Association of Individual Investors' *AAII Journal*. Even a DRIP or DSP stock is a separate account, so investors who want a consolidated portfolio must track the numbers together themselves. Small, frequent purchases make a hash of calculating a stock's basis and capital gain when an investor sells. And the discounts on shares that some companies provide their DRIP members also get counted as taxable income—although those, at least, are tracked by the company and reported on Internal Revenue Service Form 1099-DIV.

Most important, says Scott, "don't buy a stock just because it's available for direct investing. Small investors need to be, if anything, even more analytic than their better-heeled counterparts when they screen stocks. That may require going outside the 1,600 or so stocks available through company-sponsored plans. But as the number of direct investment plans grows and new options proliferate, it's getting easier all the time to invest without a broker.

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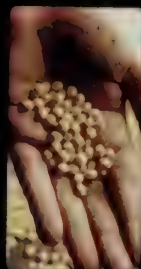
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WHAT'S BIG, BROWN, AND BEAUTIFUL?



BY ROBERT BARKER

United Parcel Service is likely to offer 10% of its shares in a November IPO. By all counts, the world's largest shipper is a financial fortress

You know it, and even slow learners like me know it: Initial public offerings are suckers' bets. Yes, some IPOs prove to be monster hits, Yahoo!s that scream their way to see-ya-later-boss-I'm-retiring gains. But most end up enriching insiders and bankers—at our expense. So why am I about to say lots of nice things about the upcoming IPO of United Parcel Service?

Because it sticks out every bit as much as do all those guys in brown uniforms, brown trucks, and brown-tailed jets. In an era full of IPOs for companies with thin revenues, fat losses, and imperceptible net worths, the world's largest package deliverer is a monumental thing of beauty. UPS's revenues make it bigger than Johnson & Johnson, its earnings make it more profitable than Boeing, its shareholder equity more valuable than Alcoa or Nokia.

Most of that equity since 1927 has been the property of UPS employees, managers, and retirees. Now they're preparing for an Oct. 25 vote on a reorganization plan. If approved, 10%, or 110 million shares, of UPS would be sold in an early November deal led by Morgan Stanley Dean Witter. Price? It isn't set yet, but the total to be raised threatens to topple Conoco, which a year ago drew \$4.4 billion in the richest IPO ever.

Once the deal's done, UPS plans to use the dough to buy back from its employee-owners an equivalent number of the shares sold to the public. The moves are aimed at keeping the insiders' equity intact while equipping management with a new tool—the “currency” of liquid stock—to help it expand globally.

That's terrific if you dress in brown every day. If you don't, the question is: At what price should UPS interest you? To answer that, I started looking into FDX, parent of UPS archrival Federal Express and the

most comparable publicly held stock. Both companies are growing beyond their basic U.S. operations into foreign markets, the delivery of e-commerce orders, and “third-party logistics”—that is, managing other companies' supply chains and inventories.

How much have investors been willing to pay for FDX, itself a

classy act? On faith that it would clean up in the e-commerce boom, FDX stock nearly tripled last fall to May, when it hit \$61.88. UPS Chief executive James Kelly isn't talking, but I help imagining that the swift ascent in shares encouraged him in July, when UPS unveiled its plan to go public. At its peak, it commanded a market value of \$18 billion, 10 times the prior 12 months' profit. A lot of air since gone out of that balloon, though. FDX closed in September that higher fuel prices denting profits, and the shares lately have edged around \$42, just 20 times earnings.

CASH ON HAND. Should that multiple apply to UPS? No way—it deserves more. As good as may be, by most measures UPS is superior (table). By revenues, it's half again as big. Its operating profit margin is twice as wide. It's growing more swiftly, it can't recall its last annual loss, and it's a financial fortress: While long-



OVERSEAS PUSH: Stock from IPO will fuel expansion

debt at FDX is more than four times its cash on hand, UPS boasts cash enough to pay off its debt and still have more than \$1 billion left over. UPS is due soon to report its quarterly results, but because it hedges against higher oil prices more fully than FDX, it's unlikely to suffer much—foresight that spells one more reason why UPS deserves a premium.

Just how bold UPS and its bankers will be when they price the IPO, I can't say. Anyway, shares will be available for small investors initially. But once the stock is trading, here's how you can size it up: At FDX's current multiple of 20 times the past 12 months' earnings, you'd pay about \$37 a share for UPS. At a premium, say times earnings, you'd pay \$42. At 25 times, price would be \$46 a share, enough to give UPS a total market value of more than \$50 billion.

As it happens, that's nearly the value investors have recently awarded Yahoo!, which nets about two pennies for every dollar earned by UPS. Could a bunch of dependable guys in brown really be worth as much as Yahoo!? Let's just hope they're not offering a sucker's bet.

For barker.online, go to www.businessweek.com/investor/ or AOL Keyword: BW Daily.

How UPS Delivers

	UPS*	FDX**
REVENUES	\$25.7 BILLION	\$16.8 BILLION
OPERATING MARGIN	13.7%	6.9%
NET EARNINGS	\$2 BILLION***	\$631 MILLION
LONG-TERM DEBT	\$2.1 BILLION	\$1.4 BILLION
CASH	\$3.2 BILLION	\$325 MILLION

*12 months ended June **12 months ended May

***Before special tax assessment

DATA: COMPANY REPORTS

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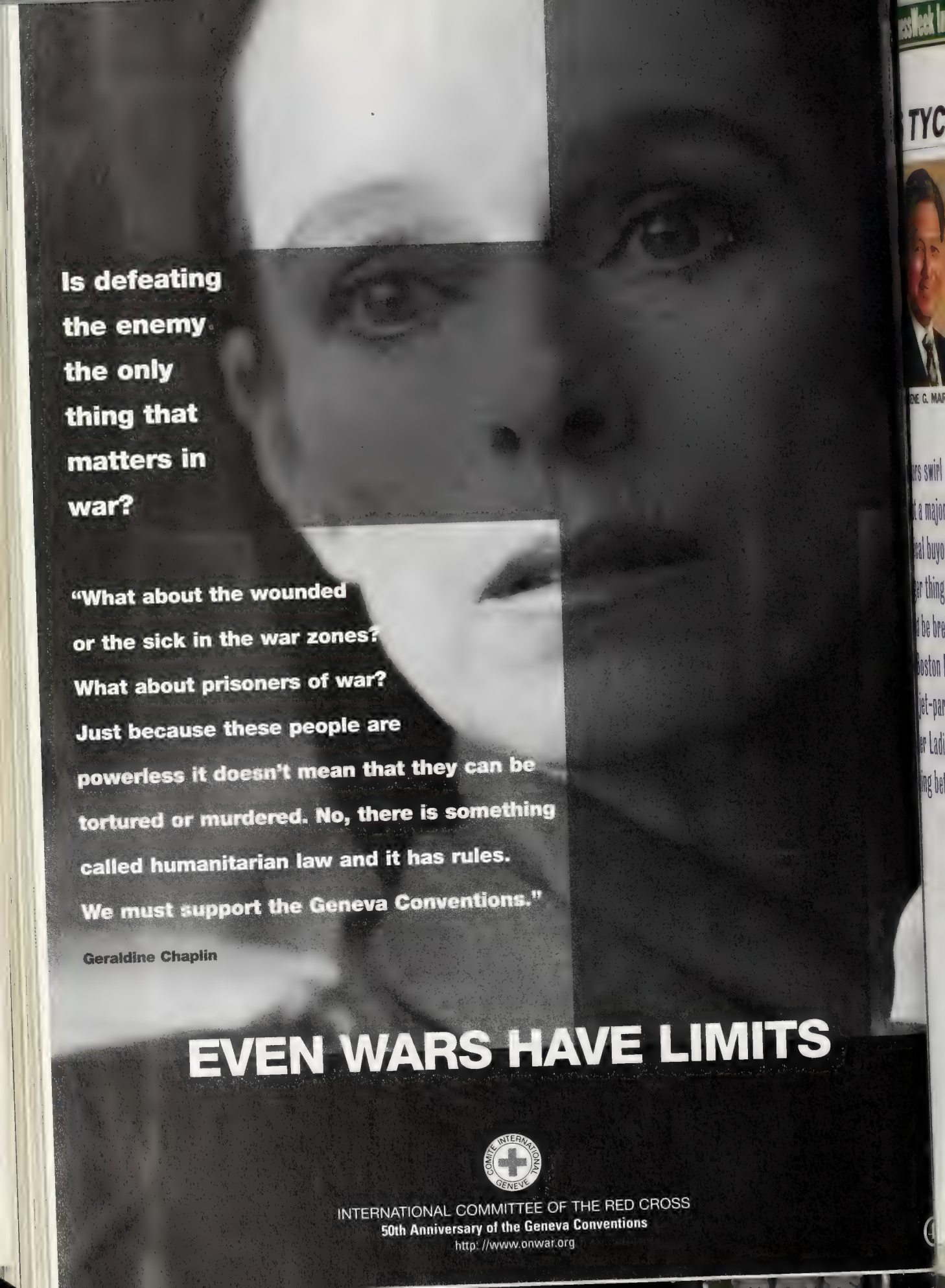
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What's the Atmosphere Like in Your Boardroom?





**Is defeating
the enemy
the only
thing that
matters in
war?**

**"What about the wounded
or the sick in the war zones?
What about prisoners of war?
Just because these people are
powerless it doesn't mean that they can be
tortured or murdered. No, there is something
called humanitarian law and it has rules.
We must support the Geneva Conventions."**

Geraldine Chaplin

EVEN WARS HAVE LIMITS



INTERNATIONAL COMMITTEE OF THE RED CROSS
50th Anniversary of the Geneva Conventions
<http://www.onwar.org>

TYCO AFTER BARD?



ENE G. MARCIAL

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Shares of Big Board-listed C.R. Bard (BCR) were flying high in the spring, when rumors swirled that Baxter International was in pursuit of Bard, which makes a wide range of disposable therapeutic and diagnostic devices used by hospitals, doctors, and nursing homes. The stock had climbed to nearly 60. It has since dropped as the takeover rumors fizzled. That wasn't the first time that Bard's name was bandied about as a target. Last year, there was scuttlebutt that it would be acquired by the hungry Tyco International, a conglomerate whose four core operations include medical supplies. Bard's shares, now at 52, have been edging up of late, from 45 in late September. The reason: Tyco talk is back.

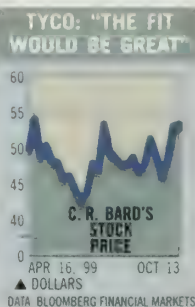
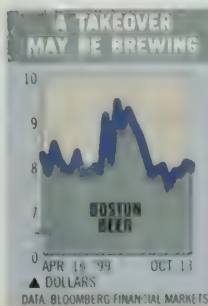
Some money pros insist that Tyco is ardently wooing Bard—again. They are betting that Tyco will end up buying the company.

A senior Tyco executive told *BUSINESS WEEK* that Tyco did indeed hold talks with Bard last year. "We are still very interested," says this Tyco official. But he was unable to confirm any deal. "Let's just say that Bard is only one of the medical companies that we are interested in. But yes, the fit would be great," he adds. Are talks going on? He wouldn't say. Tyco's stock fell 6%, to 97, on Oct. 13 after an analyst suggested that the company's earnings may have been inflated. Tyco denied the allegation. Analyst Joanne Wuensch of ING Baring, who rates the stock a "buy," says that, based on 24 times her 2000 earnings estimate of \$2.63 a share, it is worth 63. She figures Bard will earn \$2.28 in 1999 on sales of \$1.1 billion. Tyco Chief Executive Dennis Kozlowski says that he did look at Bard "with interest" last year. Bard spokesman Earle Parker declined comment as a matter of policy.

IT MAY BE MILLER TIME FOR SAM ADAMS

Brewers, particularly those that produce "craft-brewed," or specialty beers, have been in the dumps for more than a year.

Part of the reason is the stock market's long intolerance for small-cap stocks. One of them, Boston Beer (SAM), whose brands include Samuel Adams, has traded between 7 and 11 for more than 12 months, causing dismay both to its shareholders and to the analysts who track the stock. But relief may be around the corner: Some big investors think that No. 2 brewer Miller Brewing, owned by tobacco king Philip Morris, has approached



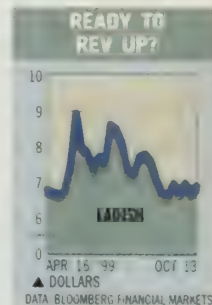
Boston Beer with an informal buyout bid. "The top people at Boston Beer didn't exactly encourage an offer," says one California investment manager who owns shares in Boston Beer. He thinks that Boston Beer's management is still studying its options to come up with a realistic value for the company. In the meantime, he says that investment bank Lehman Brothers has been buying shares recently on behalf of Miller Brewing. Lehman Brothers didn't return a call.

Analyst Timothy Swanson of A.G. Edwards, who rates Boston Beer an "aggressive buy," has a target price of 13 for the stock purely on fundamentals. "The company has been increasing earnings consistently and has a clean balance sheet," says Swanson, who figures Boston Beer stock stands to earn 54¢ a share this year and 64¢ in 2000.

Says the California shareholder: "If Boston Beer thwarts Miller's advances, Miller is apt to come back with a hostile bid." He suspects that Miller offered \$14 a share. Boston Beer declined to comment.

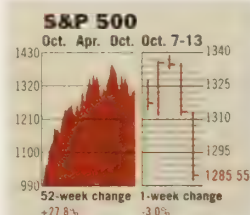
WHY THERE'S LAVISH BUYING OF LADISH

Two major shareholders of Ladish (LDSH) have been buying more shares in the open market of this Cudahy (Wis.)-based company. Ladish is a large maker of technically advanced components for the jet-engine, aerospace, and industrial markets. Its three biggest customers are General Electric, Rolls-Royce, and United Technologies. One big Ladish shareholder is the Employees Retirement Plan of Consolidated Electrical Distributors, which has accumulated a stake of more than 5%. But that is dwarfed by Grace Brothers, a private investment group in Chicago, which has built up a 25% stake. One reason behind Grace Brothers' move has to do with Ladish's largest competitor, Wyman-Gordon, which has recently been acquired by Precision Castparts at \$20 a share—or about 10 times its cash flow. Grace Brothers is betting that Ladish will end up getting acquired, as well.



Based on the purchase price of Wyman-Gordon, Ladish's valuation should be in the teens, says Brad Whitmore, a general partner at Grace Brothers. "We think it won't be long before somebody makes a run for Ladish." Now at 6 1/4 a share, Ladish trades at around 5.3 times estimated 1999 cash flow. Whitmore says Grace Brothers will press management to take steps to maximize shareholder value, including selling the company. Ladish CEO Wayne Larsen says the board will consider any bid—if it gets one. "We haven't been approached," he adds.

STOCKS



COMMENTARY

A desultory week in the financial markets. A decline in bonds dragged stocks and the dollar lower on Oct. 12, with the Dow Jones industrial average falling 231 points, its biggest decline since May 27. The decline continued on Oct. 13, as equities were depressed by a discouraging third-quarter profit report from Intel Corp. Oil stocks rose.

Data: Bloomberg Financial Markets

U.S. MARKETS

	Oct. 13	% change Week	Year
Dow Jones Industrials	10,232.2	-3.4	28.9
Nasdaq Composite	2801.4	-2.0	85.6
Nasdaq 100	2454.5	-3.1	103.4
S&P MidCap 400	380.0	-2.5	32.4
S&P SmallCap 600	172.3	-2.8	29.0
S&P SuperComposite 1500	269.8	-3.0	29.6

SECTORS

	Oct. 13	% change Week	Year
S&P/BARRA Growth	752.9	-2.9	37.7
S&P/BARRA Value	556.1	-3.2	19.9
S&P Basic Materials	124.8	-0.5	14.9
S&P Capital Goods	980.2	-4.3	36.8
S&P Energy	808.7	-0.5	11.7
S&P Financials	122.1	-5.2	17.2
S&P REIT	75.0	-2.2	-7.4
S&P Transportation	590.5	-3.1	5.4
S&P Utilities	237.9	-2.7	-6.5
GSTI Internet	457.5	-5.7	234.9
Morgan Stanley Cyclical	533.3	-2.1	30.9
PSE Technology	624.6	-4.9	109.9

BEST-PERFORMING GROUPS

	Last month %	Last 12 months %
Gold Mining	29.4	Communications Equip. 146.4
Defense Electronics	9.5	Instrumentation 118.5
Specialty Retailers	5.7	Semiconductors 116.0
Genl. Merchandise Chains	5.5	Broadcasting 95.5
Airlines	5.2	Computer Software 81.5

GLOBAL MARKETS

	Oct. 13	% change Week
S&P Euro Plus	1314.6	-2.1
London (FT-SE 100)	6113.4	0.3
Frankfurt (DAX)	5295.4	-1.1
Tokyo (NIKKEI 225)	17,754.5	-0.2
Hong Kong (Hang Seng)	12,475.9	-4.2
Toronto (TSE 300)	7037.0	0.7
Mexico City (IPC)	5076.1	-0.8

FUNDAMENTALS

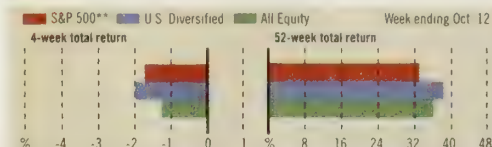
	Oct. 12	Week ago
S&P 500 Dividend Yield	1.29%	1.30%
S&P 500 P/E Ratio (Trailing 12 mos.)	30.8	30.9
S&P 500 P/E Ratio (Next 12 mos.)*	22.8	22.4
First Call Earnings Surprise*	2.87%	5.01%

*First Call Corp.

TECHNICAL INDICATORS

	Oct. 12	Week ago	Re
S&P 500 200-day average	1309.9	1307.1	Ne
Stocks above 200-day average	29.0%	31.0%	Pe
Options: Put/call ratio	0.55	0.58	Ne
Insiders: Vickers Sell/buy ratio	1.16	1.24	Pe

MUTUAL FUNDS



Data: Morningstar, Inc.

**Vanguard 500 Index fund

EQUITY FUND CATEGORIES

Leaders	Four-week total return	%	Laggards	Four-week total return	%
Precious Metals	18.7		Natural Resources	-7.6	
Communications	5.4		Small-cap Value	-4.7	
Europe	2.4		Mid-cap Value	-4.6	
Technology	1.3		Pacific/Asia ex-Japan	-4.0	
Foreign	0.9		Large-cap Value	-3.8	
Leaders	52-week total return	%	Laggards	52-week total return	%
Technology	140.9		Real Estate	3.7	
Japan	107.8		Precious Metals	5.0	
Communications	89.1		Domestic Hybrid	15.4	
Diversified Pacific/Asia	75.2		International Hybrid	16.5	
Small-cap Growth	67.7		Mid-cap Value	18.5	

INTEREST RATES

KEY RATES	Oct. 13	Week ago	Year ago
MONEY MARKET FUNDS	4.95%	4.92%	4.97%
90-DAY TREASURY BILLS	4.98	4.81	4.02
1-YEAR TREASURY BILLS	5.37	5.36	4.19
10-YEAR TREASURY NOTES	6.11	6.04	4.58
30-YEAR TREASURY BONDS	6.27	6.17	5.00
30-YEAR FIXED MORTGAGE†	7.86	7.90	6.93

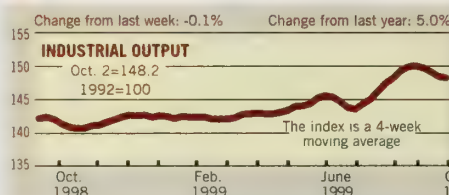
BLOOMBERG MUNI YIELD EQUIVALENT

Taxable equivalent yields on AAA-rated, tax-exempt municipal bonds, assuming a 31% federal tax rate

	10-yr. bond	30-yr. bond
GENERAL OBLIGATIONS	5.03%	5.7%
TAXABLE EQUIVALENT	7.29	8.3%
INSURED REVENUE BONDS	5.19	6.0%
TAXABLE EQUIVALENT	7.52	8.7%

†Barr's, Inc.

BW PRODUCTION INDEX



Information on each of the index components is at www.businessweek.com.

BW production index Copyright 1999 by The McGraw-Hill Companies

The production index slipped for the consecutive week, while the unaveraged index rebounded by 1%, moving up to 148.6, from 147.9 for the month of September, the index dipped the first time since June, dropping to 147.9 from 150 in August. After seasonal adjustment, all components posted gains. Steel output up 3.4%, with the capability utilization rate 81.3%. Electric power increased its output 2.5%, and autos, trucks, and crude oil also up strongly.

THE WEEK AHEAD

CONSUMER PRICE INDEX Tuesday, Oct. 19, 8:30 a.m. EDT ► Consumer prices for all goods and services probably increased by 0.3% in September, says the median forecast of economists surveyed by Standard & Poor's MMS, a division of The McGraw-Hill Companies. Excluding food and energy, core prices likely also rose 0.3%. In August, total consumer prices increased 0.3%, pushed up by a 2.7% surge in energy prices. But core prices edged up just 0.1%.

HOUSING STARTS Tuesday, Oct. 19, 8:30 a.m. EDT ► Housing starts likely totaled an annual rate of 1.64 million in September, down from 1.68 million in August. The data

will show how much Hurricane Floyd may have interrupted new construction projects.

INTERNATIONAL TRADE Wednesday, Oct. 20, 8:30 a.m. EDT ► The S&P MMS median forecast is that the trade deficit for goods and services likely stood at \$24.9 billion in August, very little changed from the July record level of \$25.2 billion. Exports rose for two months in a row, including a 0.5% gain to \$79 billion in July, and the forecast calls for exports to have grown again in August. But imports have jumped sharply over the past seven months, with the expectation that they were flat in July.

FEDERAL BUDGET Friday, Oct. 22, 2 p.m. EDT ► The U.S. Treasury will probably report a monthly surplus of \$50 billion in September, the last month of fiscal 1999. That would be better than the \$37.4 billion in September, 1998. The surplus expected for this September, when quarterly tax payments are due, would result in a final budget surplus of \$117 billion for 1999, far greater than the \$69 billion in 1998.

BusinessWeek ONLINE

For more investment data and the components of the production index, visit www.businessweek.com.

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IN PRAISE OF BUSINESS ALLIANCES

Probably the biggest problem facing corporate executives these days is how to manage amid the rampant uncertainties of the New Economy. With the business environment changing at a dizzying rate, companies are being forced to decide where to target their limited resources, even as they must rely on untested strategies.

Little wonder that companies are looking to make alliances with a wide variety of partners as a way of reducing risk, obtaining access to key technology, and broadening their customer base (page 106). The conventional corporate structure is a binary model—either you are inside the corporate walls or outside of them. Alliances, by contrast, are a gray area, where the partners share some goals but not others. Such a model is better suited to the New Economy. As a result, the average large company now has more than 30 alliances, up from none a decade ago, says Anderson Consulting.

Indeed, alliances, used judiciously, represent a good way to combine the best aspects of U.S.-style capitalism—with its emphasis on all-out competition—with the more cooperative mentality of the *keiretsu* in Japan and the *chaebol* of South Korea. In high-uncertainty industries such as technology, media, and pharmaceuticals, alliances have helped facilitate far faster innovation than companies could manage by themselves. And with many businesses trying to crack multiple foreign markets at once, they are relying on alliances with local partners to smooth the way.

But it's possible to go too far down the cooperative route. Companies shouldn't use alliances as a substitute for taking risks themselves or as a way of divvying up the market and eliminating competition. In the end, it is vision and willingness to innovate that will drive an economy forward, not the ability to make alliances.

ARE WE GETTING BLASE ABOUT Y2K?

Are you Y2K-complacent? According to the latest accounts, most of the U.S. economy seems to be Y2K-compliant (page 38). With years of frenzied remedial efforts apparently paying off, many policymakers, consumers and businesses are beginning to anticipate a comparatively calm New Year's Day.

Nevertheless, it is still far too early to get relaxed about this unprecedented cyber event. For one, the increasingly open U.S. economy is still susceptible to disruptions in other countries, many of which are lagging well behind in Y2K preparations. The International Monetary Fund estimates that capital outflows and major disruptions resulting from Y2K problems could take two percentage points off potential economic growth next year for emerging nations. Moreover,

while the U.S. financial system is likely to be Y2K-ready, the global financial system probably isn't. The Asian financial crisis, in particular, has diverted efforts to upgrade computer systems across the Pacific Rim. The net impact could be a substantial slowdown in that region.

Then there is the problem of stockpiling. There are reports that inventories are being built up to carry companies through both this quarter and the first quarter of 2000, which could add as much as an extra percentage point to gross domestic product growth in the fourth quarter.

At the same time, many corporations and families are expected to build up their cash on hand, "just in case." For businesses, this meant a deluge of new bond sales this summer, which were partly responsible for driving long-term rates above 6%. On the individual level, the Federal Reserve expects households to hold some extra cash, but some may be taking out much more than forecast. Will they simply turn it to the bank in January? Or will they spend it, triggering an unforeseen consumer boom that adds to inflationary pressures?

Maybe the optimists will prove to be right, and Y2K will pass as a nonevent. But the truth is that a host of unknown technological, financial, and economic crosscurrents will be unleashed. Anyone who stints on preparation may regret it.

A SUBTLE SHIFT IN JAPAN

Despite repeated assertions that Japan is about to bounce back, the world's second-largest economy continues to scrape bottom. According to the International Monetary Fund, Japan is expected to grow at only a lackluster rate in 2000, and the country is dependent on exports to keep it from sinking even further.

Nevertheless, there may be real changes occurring beneath the surface. The biggest difference: a cultural shift that is transforming the country's communal way of doing business (page 68). Some aspects of this transformation are painful, such as the end of lifetime employment. But the result is the slow emergence of a more open and entrepreneurial outlook.

Signs of this evolution are showing up everywhere. For example, Japan Inc. is no longer so hostile to the outside world. Foreign investment is running at an annualized pace of \$1 billion, triple the rate of a year ago. More and more Japanese are embracing the Internet. And the old mores that kept women out of the workforce finally are crumbling.

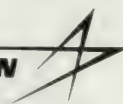
But it's far too early to celebrate the emergence of a new Japan. The government needs to sustain its commitment to reform. Especially important is the need to further open the Japanese home market to foreign competition, which will force Japanese companies to modernize. The eventual result will be a re-energized Japan, which can only be beneficial to the global economy.



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